The Hy-tex House
OF MODERATE COST

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OF MODERATE COST

A HOUSE OF BEAUTY
GOOD INVESTMENT

PRICE, FIFTY CENTS

HYDRAULIC-PRESS BRICK COMPANY
SAINT LOUIS

Introductory

A great deal of attention is being given at present to the problem of an inexpensive house for suburbs and outlying districts; and in general there is an evident desire to combine, where possible, low cost with a certain degree of picturesqueness. One cannot, however, make the picturesque offhand and to order; it is in a great degree a matter of time. The ancient cottages, which we admire now, were not built to look picturesque; they were built in what appeared, to their constructors, to be the most economical and convenient manner; and their present charm is the effect of time and association. Their low walls, high pitched roofs, and often abnormally small windows, taken to be picturesque, have been frankly imitated, so that we repeatedly see in new houses today these very low walls and very high pitched roofs. Although the windows are not so small as in the old cottages, yet they are much smaller than the best hygienic conditions would demand.

All these attempts are bound to fail of their object because they are palpably artificial and self-conscious efforts to be picturesque—mere imitations of the former manner of building. The low walls are an element of economy in cost, or supposed to be so; but the economy, in consideration of the large roof-space required, is perhaps over-rated. In any case, it is false economy because obviously not the best or most workmanlike manner of producing a convenient interior in a small habitation. The result in the upper story is far from satisfactory, as the rooms are sure to be cut up by the sloping ceilings into inconvenient sizes or shapes.

The practical manner of solving the problem must involve putting aside sentiment and acquired association and considering how best to build houses with the methods of construction and materials now available.

In recent years, owing to the increasing tendency on the part of the American public to have homes in the country or in the open parts of cities, there has been brought about a great demand for the house of moderate cost, which will have a certain character of its own, and which the owner may point to with a sense of pride as a home reflecting his tastes.

Believing that the prospective builder would appreciate seeing in sketch form and plan a group of houses of this character, which might suggest ideas that would aid him in consulting with his architect, the Hydraulic-Press Brick Company offers this collection of drawings. It was with the desire, not only to interest more of the best architects in America in this kind of creative work, but also to afford the intending home builder helpful suggestions in formulating his plans, that this Company recently

conducted a competition for a brick house through the medium of a widely known architectural journal, *The Brickbuilder* of Boston.

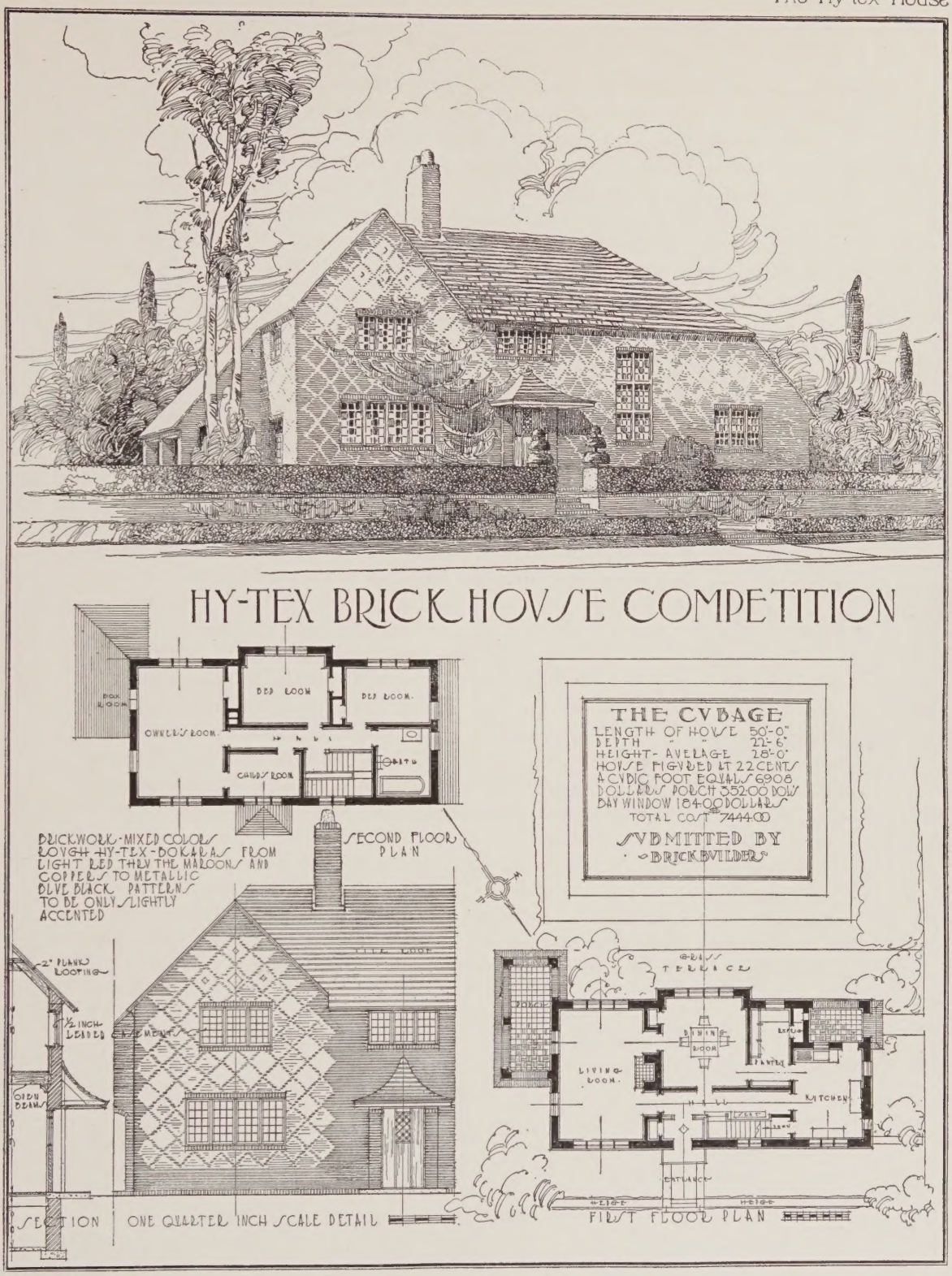
The architects who designed these houses worked with a definite program before them. The problem was a detached house, faced with Hy-tex brick, to be built complete at a cost not to exceed $7500. Provision was to be made for the usual accommodations and conveniences for a small American family of moderate means. It was assumed that the house was to be located in a town, small city, or a suburb of a large city, on a level lot of any size or shape.

All the houses shown in this book were figured at the rate of twenty-two cents per cubic foot, which included cost of excavation, plumbing, heating, electric wiring, hardware and painting; although extravagance of individual taste for expensive interior trimming, plumbing, hardware, etc., may add appreciably to the cost. Porches and verandas were figured separately at one-fourth of their total cubage, provided they projected beyond the bearing walls, and at full cubage if included within such walls.

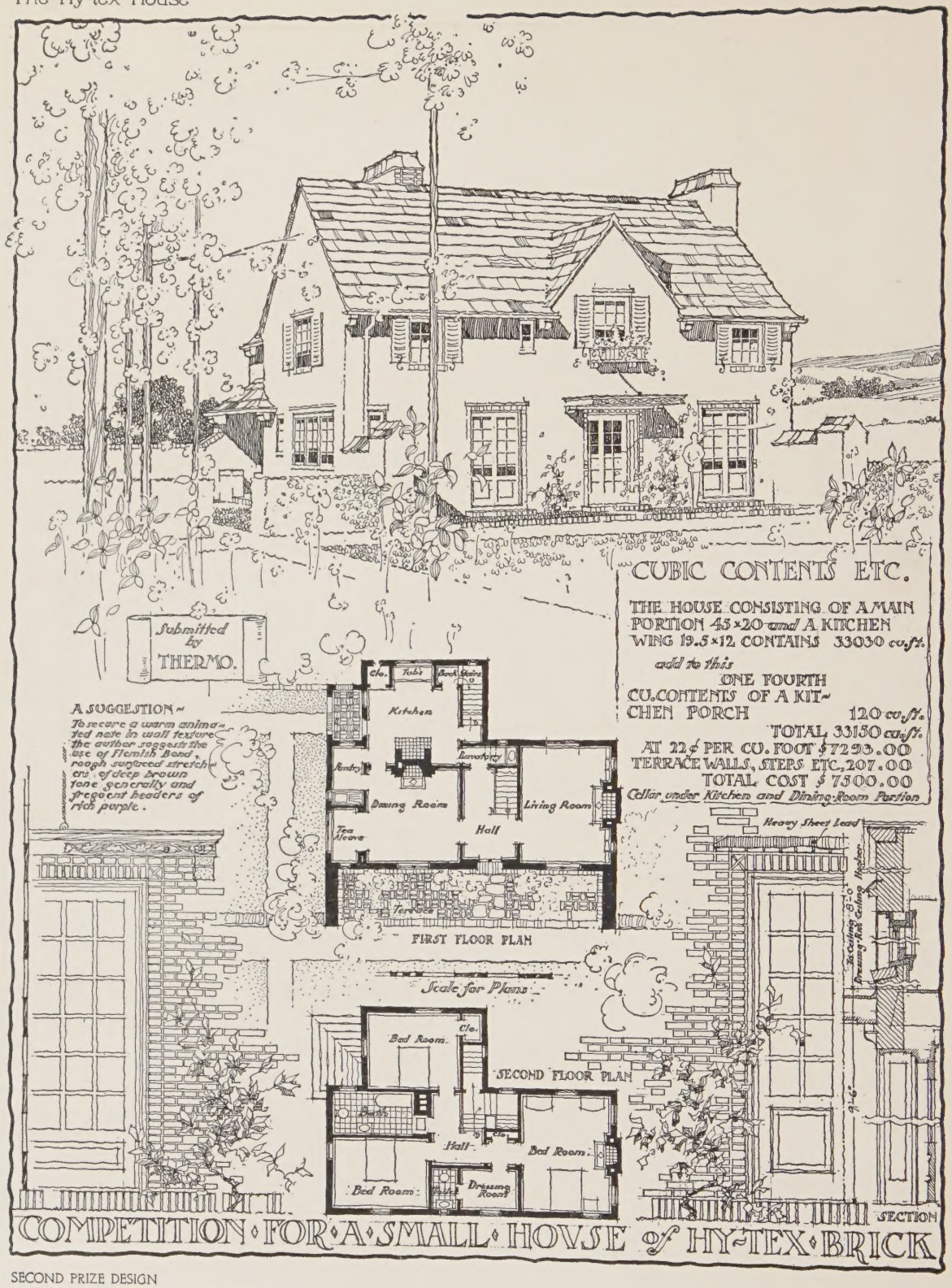
The jury of award was made up of five members of the architectural profession prominently connected with this class of work throughout the Middle West. First consideration was given to the design and its fitness to the material employed, and special attention to the floor plans. Nearly four hundred designs were submitted, and so general was the excellence of the work that the task of elimination and selection was no easy matter.

In presenting the following designs and plans, it is not expected that any one will commit the serious mistake of attempting to build his own house without the aid of an experienced architect. If he makes such an attempt, he may be assured that he will fall into confusion and difficulties that will both threaten the ruin of his plans altogether and run him into added costs. Technical knowledge and professional skill in the building of a house will not only secure higher artistic results, but save far more than the comparatively modest fee of the architect.

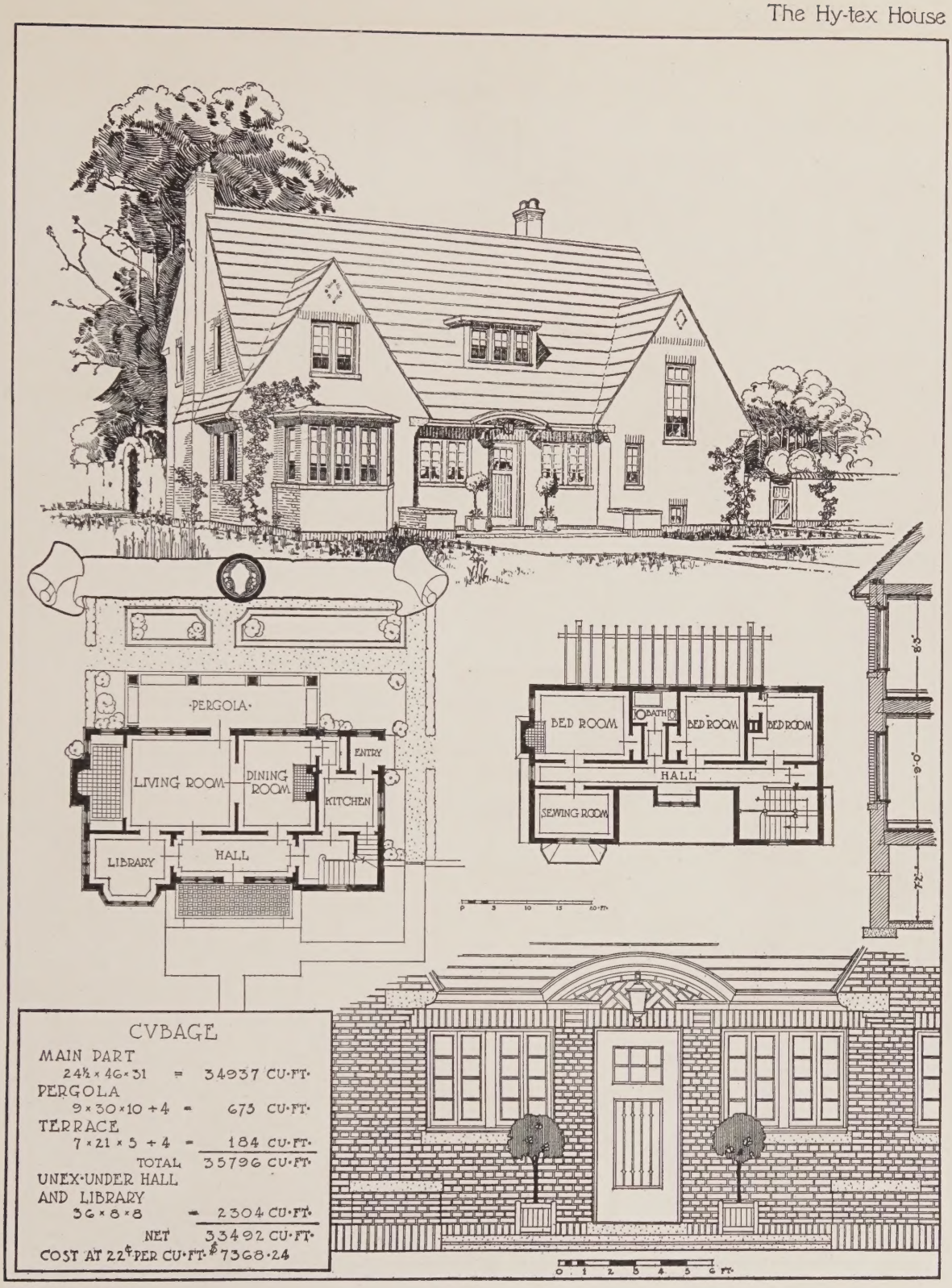
These plans will fully serve their purpose if they help to develop and give coherent form to the somewhat vague and indefinite ideas of the intending builder, when he first begins to plan a house of his own. With the belief that they will admirably serve this purpose, they have been published, and are now presented to the interested reader.



FIRST PRIZE DESIGN
SUBMITTED BY I. P. LORD
31 Beacon Street, Boston, Mass



SECOND PRIZE DESIGN
SUBMITTED BY RICHARD M. POWERS
110 State Street, Boston, Mass.

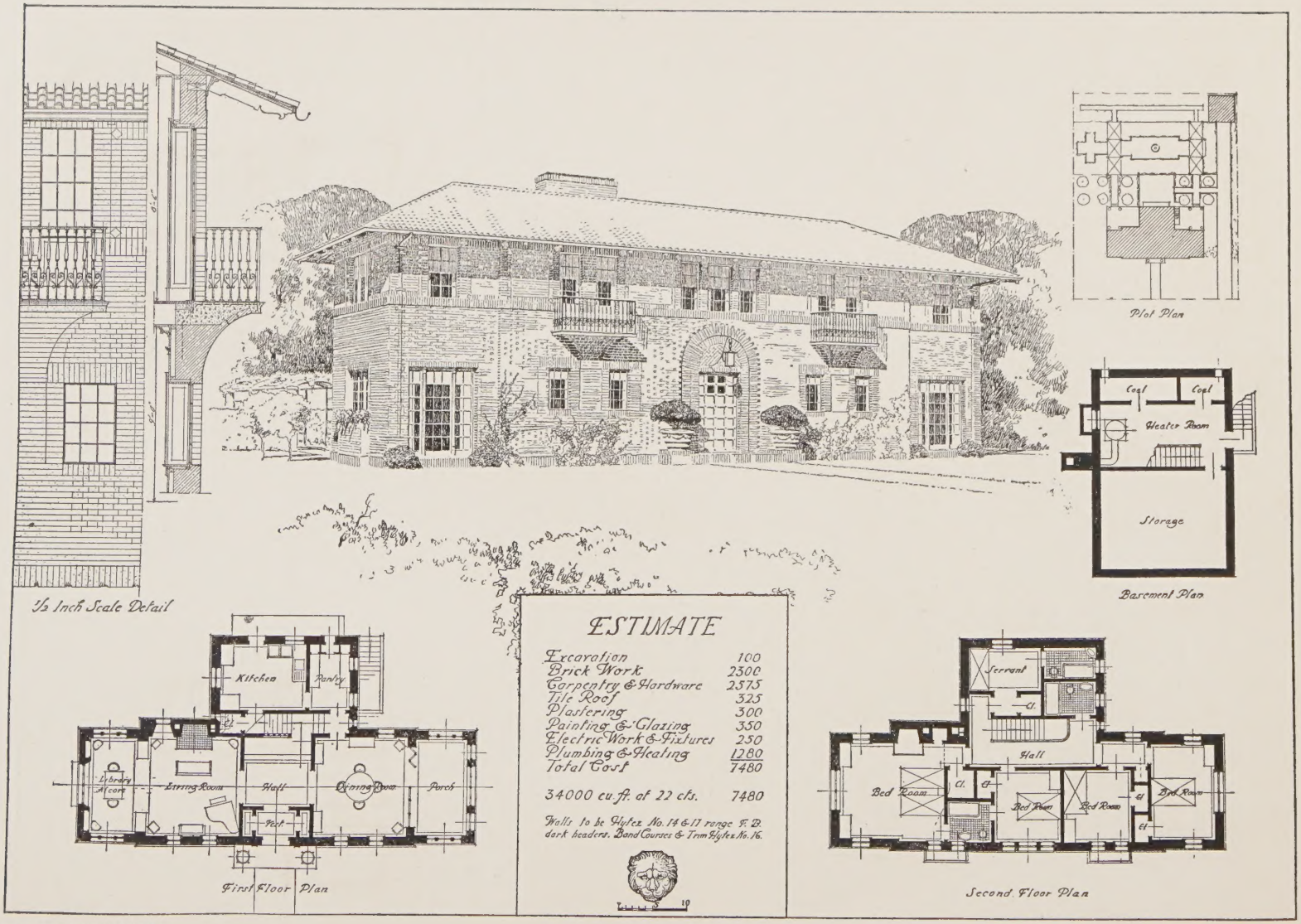


CUBAGE

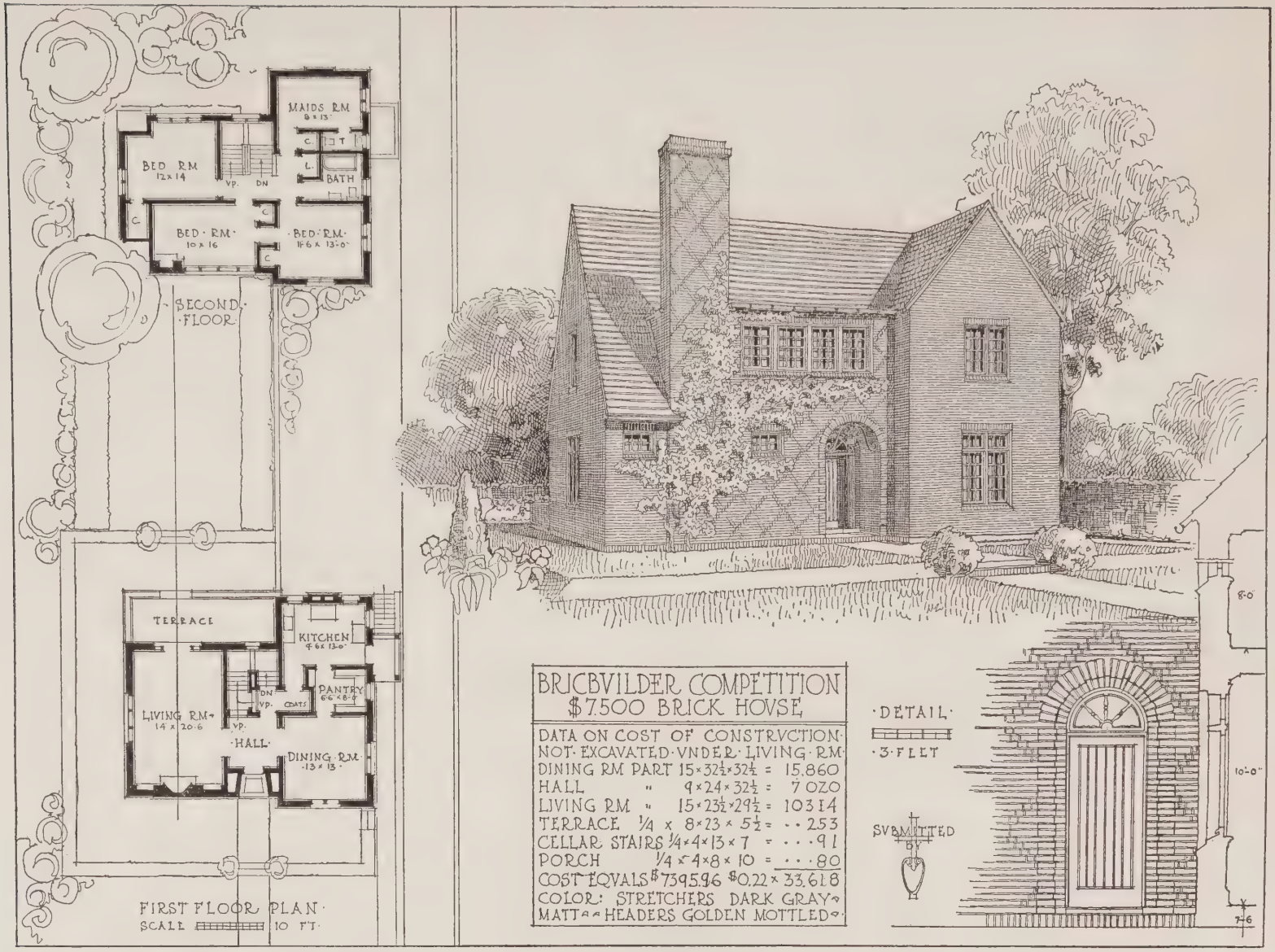
MAIN PART		
24½ × 46 × 31	=	34937 CU·FT·
PERGOLA		
9 × 30 × 10 + 4	=	673 CU·FT·
TERRACE		
7 × 21 × 5 + 4	=	184 CU·FT·
TOTAL		35796 CU·FT·
UNEX·UNDER HALL AND LIBRARY		
36 × 8 × 8	=	2304 CU·FT·
NET		33492 CU·FT·

COST AT 22¢ PER CU·FT· $7368·24

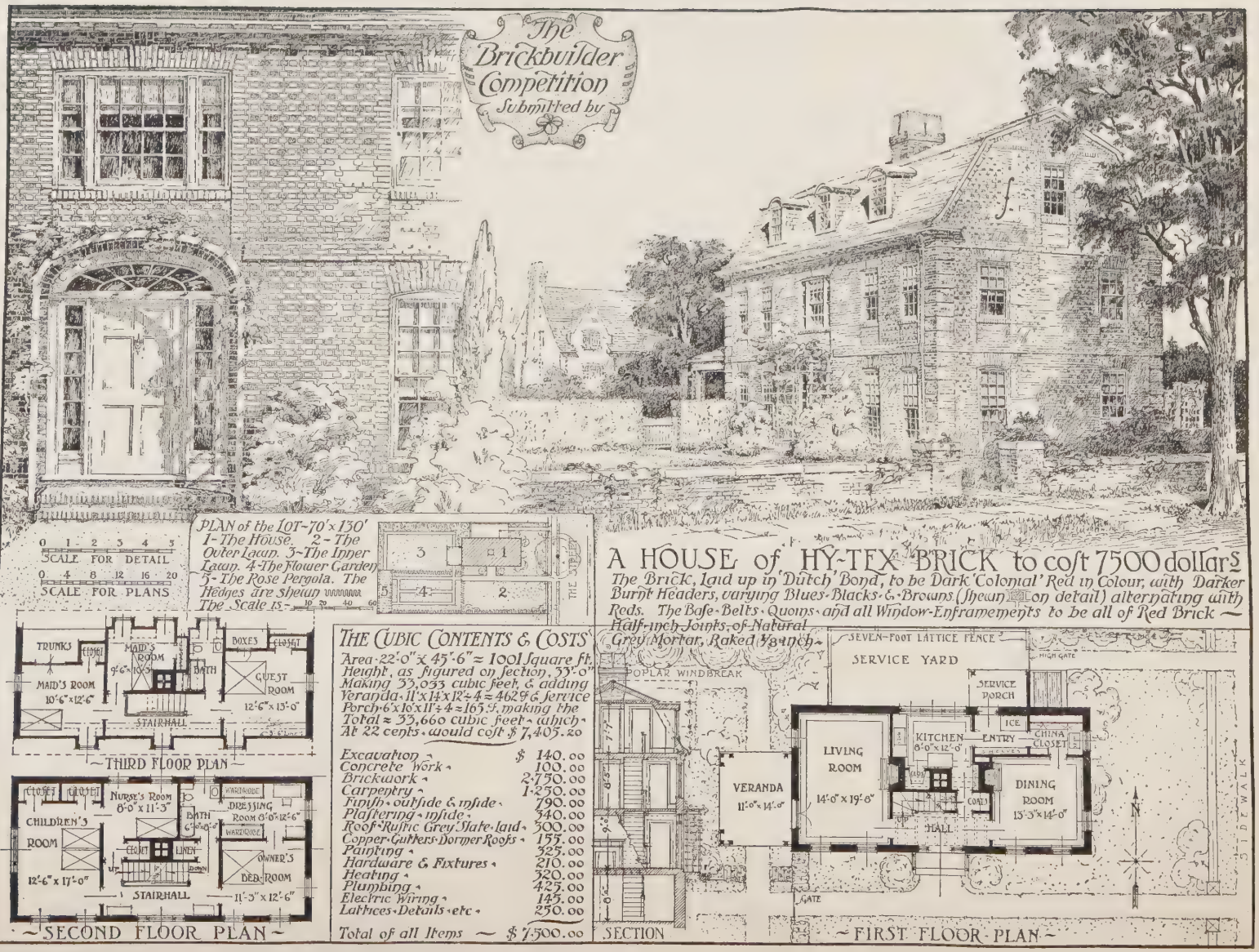
THIRD PRIZE DESIGN
SUBMITTED BY J. F. MURPHY AND J. R. COLEAN
810 Hubbell Building, Des Moines, Iowa



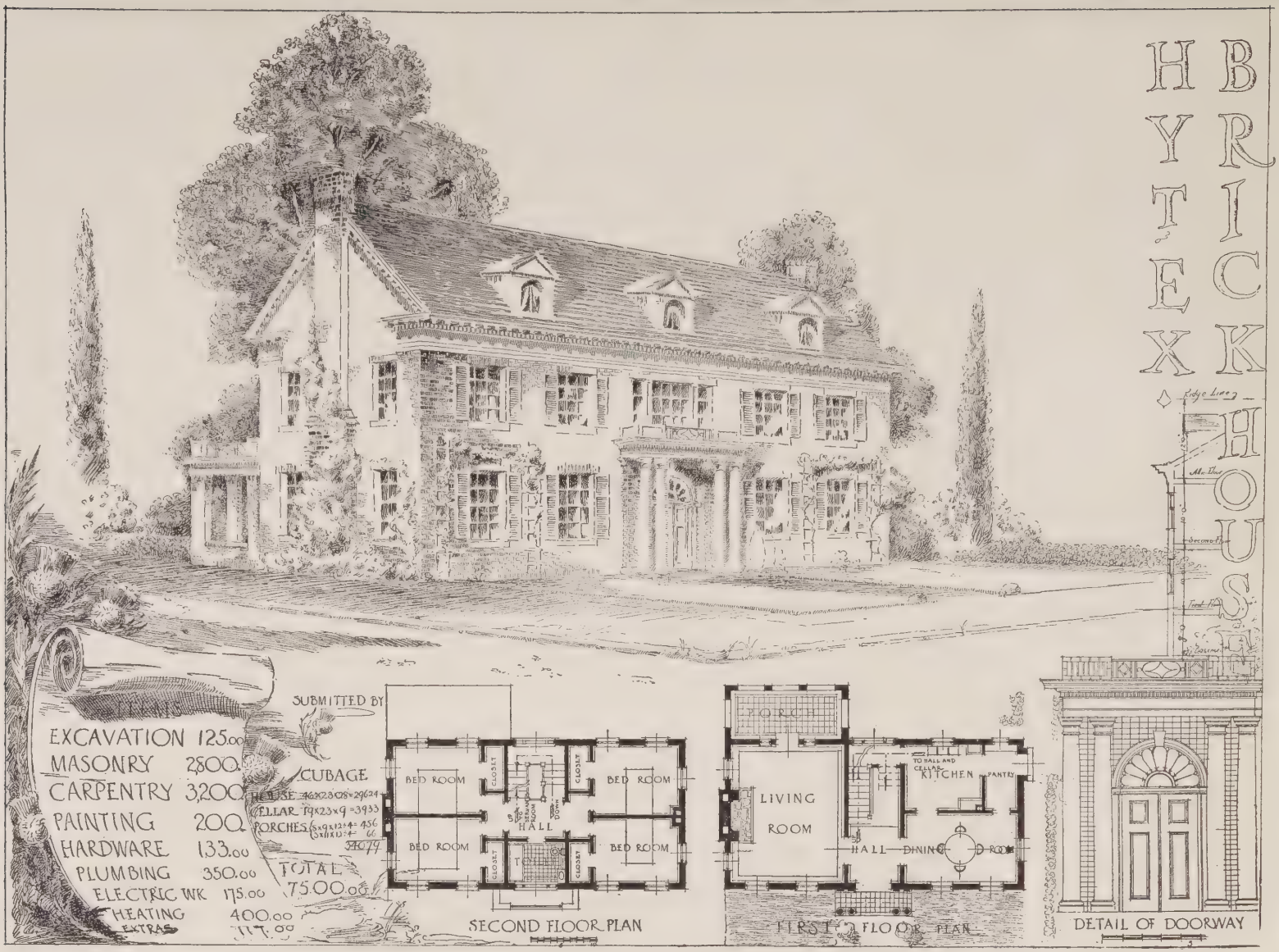
FOURTH PRIZE DESIGN
SUBMITTED BY LELAND H. LYON
7 East 42d Street, New York, N. Y.



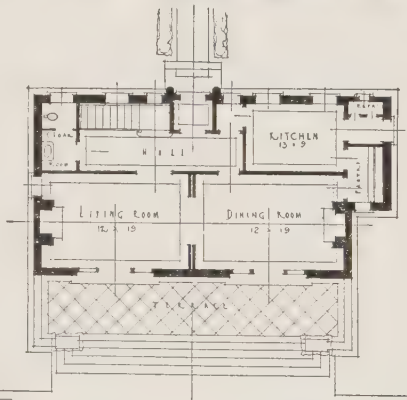
MENTION DESIGN
SUBMITTED BY OLAF WILLIAM SHELGREN
1314 Prudential Building, Buffalo, N. Y.

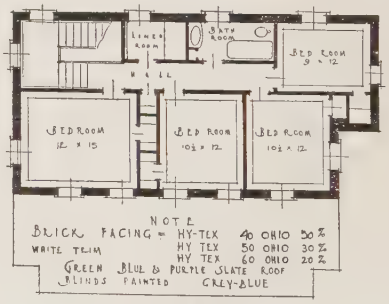


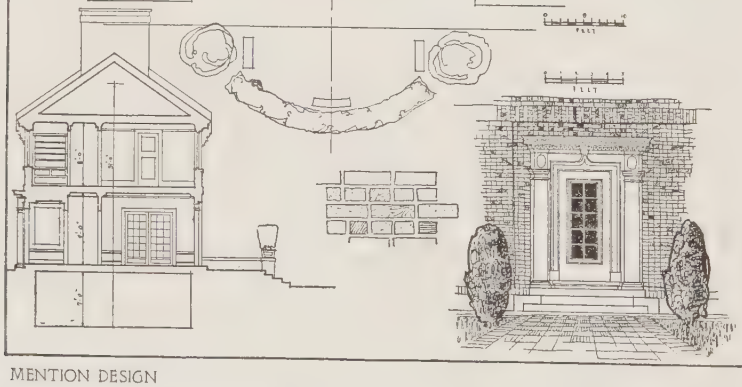
MENTION DESIGN
SUBMITTED BY RICHARD R. STANWOOD
14 Mount Vernon Street, Boston, Mass.



MENTION DESIGN
SUBMITTED BY DUNCAN McLACHLAN, JR.
624—47th Street, Brooklyn, N. Y.







BRICKBUILDER COMPETITION

FOR A HOUSE OF HY-TEX BRICK

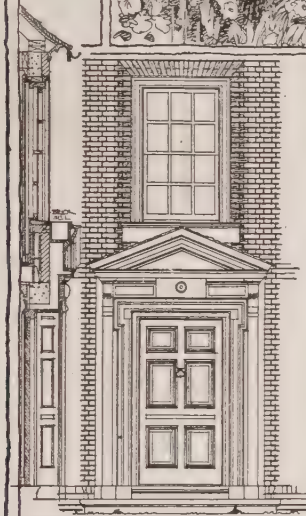
CUBAGE & COST

41' X 23' X 31' + 5'X 14'X28' = 31,193 ft

31,193 @ 22¢ =	$ 6.862.00
TERRACE	400.00
TWO MANTELS	120.00
FRONT ENTR DOORWAY	100.00
BALANCE	18.00
	$7500.00

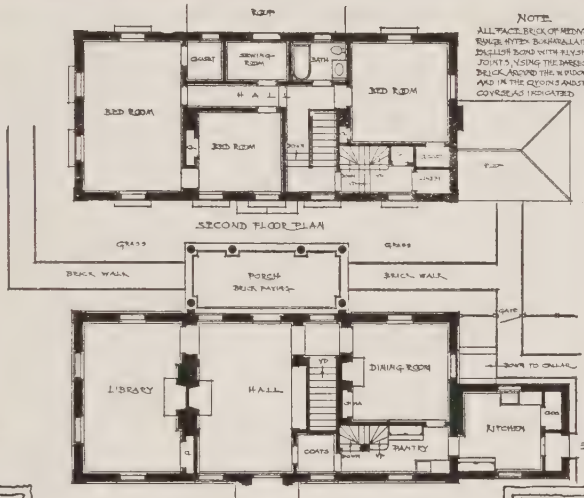
SUBMITTED BY XET-YH

MENTION DESIGN
SUBMITTED BY DOUGLAS RITCHIE
1 Belmont Street, Montreal, Quebec, Canada

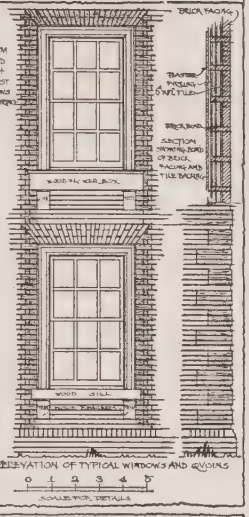


SECTION DETAIL OF MAIN ENTRANCE

SCALE OF FEET SCALE FOR DETAILS



NOTE.
ALL FACE BRICK OF MEDIUM RANGE MIXED RANDOM LAID ENGLISH BOND WITH FLUSH JOINTS, USING THE HEADERS OF BRICK AROUND THE WINDOWS AND IN THE QUOINS AND STRING COURSES AS INDICATED.



THE CUBAGE

MAIN BUILDING	21'x42'x34'-5" = 31671
KITCHEN WING	11'-6"x13'-9"x12'-3" = 1935
PORCH (PART EXCAVATED)	8'-3"x19'-9"x11'-0" ÷ 4 = 448
TOTAL CUBIC CONTENTS	34054
TOTAL COST AT 22 CENTS PER CUBIC FOOT	$7492.

ITEMIZED ESTIMATE OF COST

EXCAVATING	$ 150
MASONRY	3050
PLASTERING	300
LUMBER, CARPENTRY AND HARDWARE	1000
MILL WORK	1600
ROOFING AND METAL WORK, ETC.	250
PAINTING AND GLAZING	250
WARM AIR HEATING	350
PLUMBING AND RANGE	400
ELECTRIC WIRING	150
TOTAL COST	$7500.

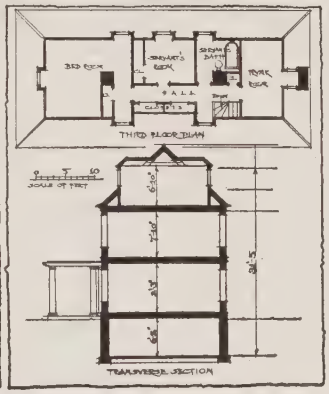
DESIGN FOR A BRICK HOUSE TO COST $7500 TO BE FACED WITH HY-TEX BRICK

MANUFACTURED BY THE

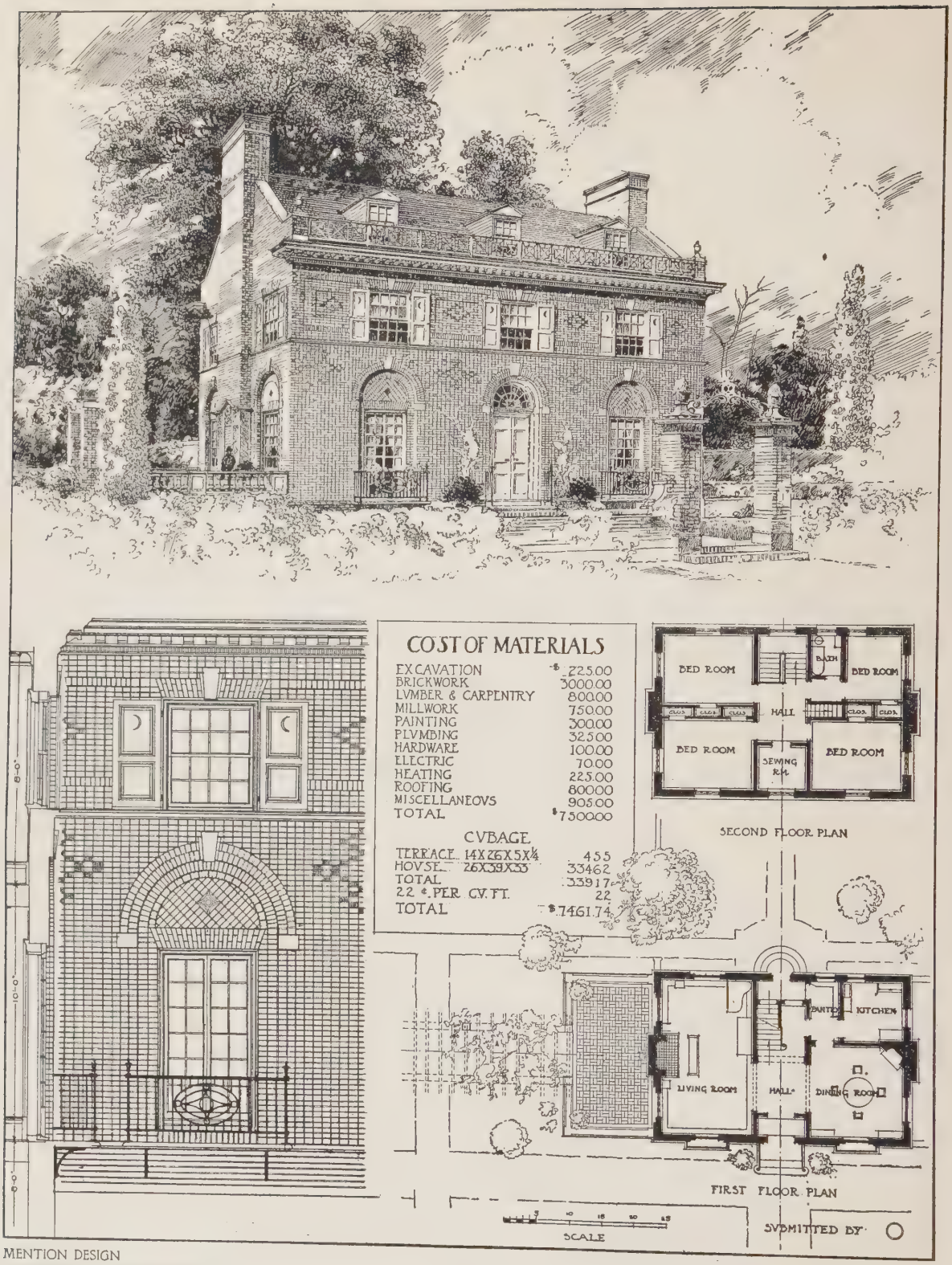
HYDRAULIC-PRESS BRICK COMPANY

SUGGESTED BY TRISTRAM TEMAIR

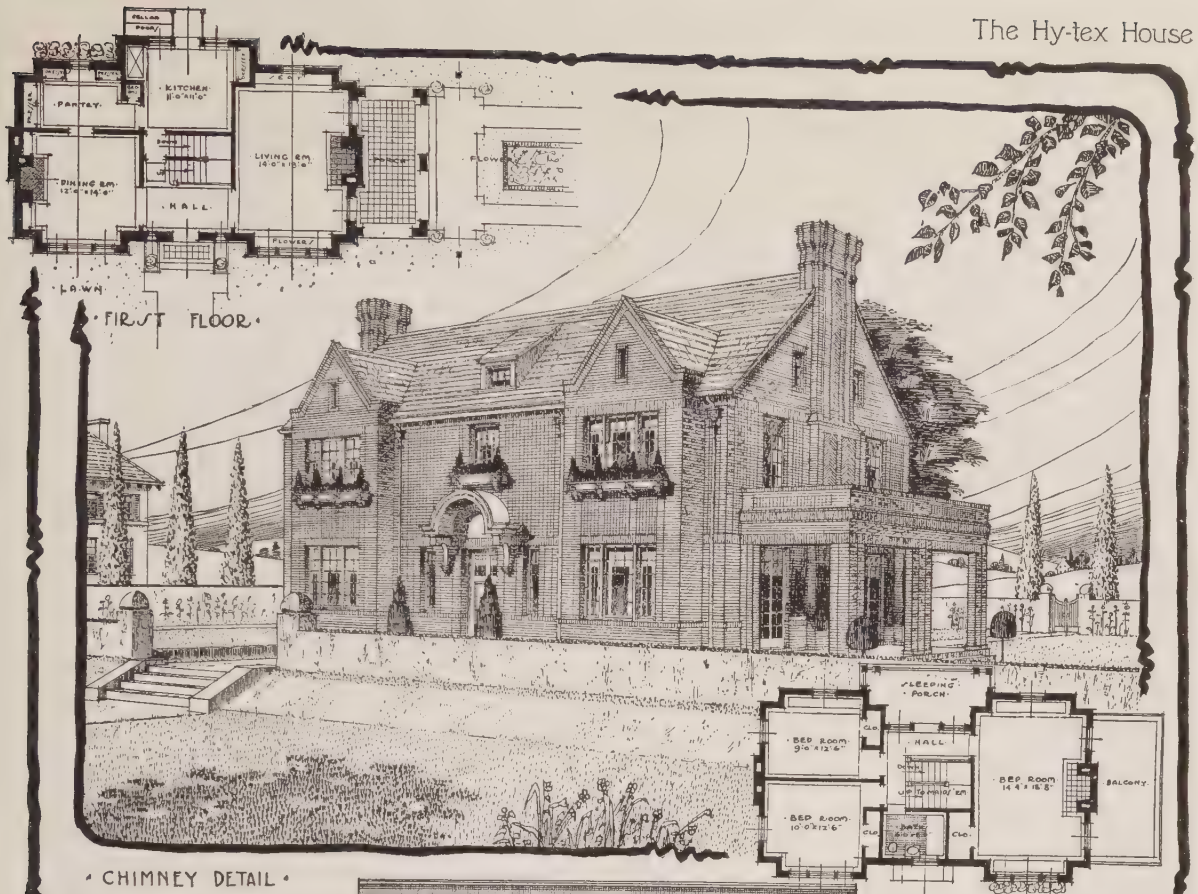
FEB. 10, 1914



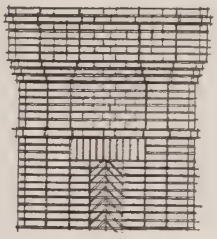
MENTION DESIGN
SUBMITTED BY ALFRED COOKMAN CASS
77 Washington Place, New York, N. Y.

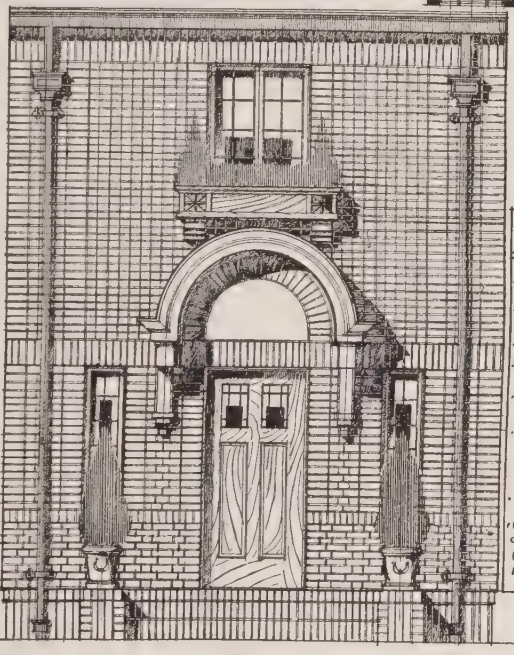


MENTION DESIGN
SUBMITTED BY ANTONIO DI NARDO
101 Park Avenue, New York, N. Y.

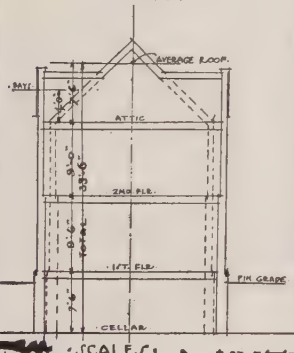


CHIMNEY DETAIL





SECTION



CUBIC CONTENTS

MAIN BODY	20'x42'x33'6" =	28,140
BAYS	4(11'6"x1'6"x30') =	2,070
REAR PROJECTION	18'x5'x33' =	2,970
PORCH	(18'x10'x16')÷4=	720
AREAWAYS		100
	TOTAL CU. FT.	34,000

COST 34,000 CU. FT. @ 22¢ = $7,480

COLOR SCHEME: HY-TEX VELOUR BODY COLOR. DIVERSE PATTERN/ LIGHTER SHADE. RAKED OUT JOINTS 1ST STORY FLUSH JOINTS ABOVE 1ST. FLR. WINDOW HEADS. WHITE MORTAR.

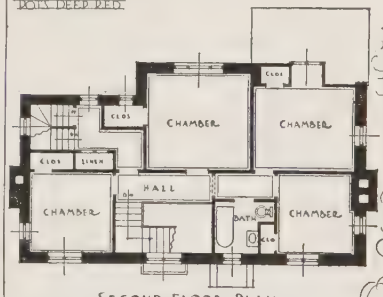
SCALES: PLANS, DETAILS

HY-TEX BRICK HOUSE COMPETITION

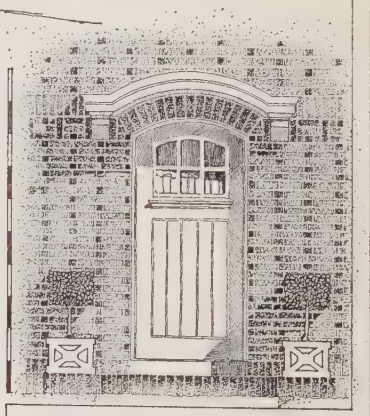
SUBMITTED BY

DESIGN BY FRED B. O'CONNOR
232 B Ontario Street, Albany, N. Y.

COLOR SCHEME
BRICK LIGHT RED
HEADERS & PATTERNS DARKER SHADES
ROOF SILVER GRAY
WOODWORK WHITE
BOXES DEEP RED



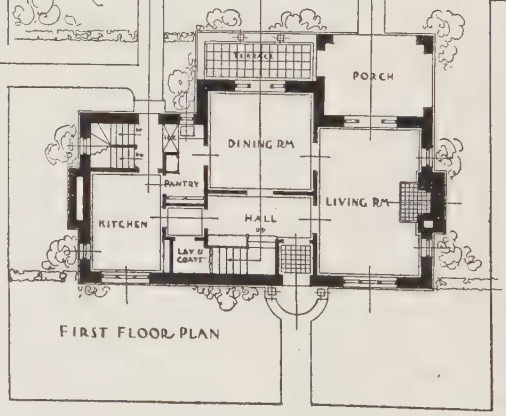
SECOND FLOOR PLAN



COMPETITION
FOR A
BRICK HOUSE
TO COST $7500
GIVEN BY
THE BRICKBUILDER
FEBRUARY 1914

SCALE FOR PLANS
SCALE FOR PERSPECTIVE & SECTION
SCALE FOR DETAIL

"HIS LAST ATTEMPT"



FIRST FLOOR PLAN

NOTES:
CUBAGE IS FIGURED IN FOUR SECTIONS: MAIN BODY OF HOUSE: 21X44X33=30492 CU FT: DINING RM PROJECTION 4X16X33=2112 CU FT PORCH 10X1.6X15÷4=306 CU FT: TERRACE 6X15X4÷4=90 CU FT TOTAL CU FT 33200X.22= $7,304.00 TOTAL COST WITH BASEMENT UNDER ENTIRE HOUSE:

EXCAVATION	150	HEATING	650
PLASTERING	400	MASONRY	2700
PLUMBING	550	SHEET METAL	100
LUMBER	900	WIRING	100
LIGHT FIXTURES	150	CARPENTRY	550
HARDWARE	100	GAS PIPING	100
MILL WORK	500	HARDWARE	150
PAINTING ETC	250		

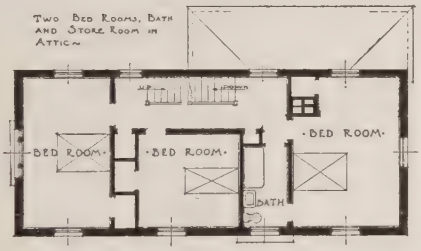
DESIGN BY WARNER A. EBBETTS
6049 Catharine Street, Philadelphia, Pa.

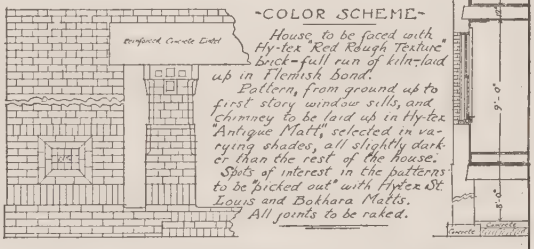
-CUBAGE-

Main Bldg. (Cellar)	37 × 20' × 32' =	24651.25 @ 22¢ =	5423.28
" " No "	11' × 20' × 28' =	6718.81 @ " =	1478.15
Kitchen Wing	16' × 7' × 18' =	2058.8 @ " =	451.85
" Porch	10' × 7' × 19' =	1087. @ 22¢ =	56.60
Areas			90.19
		TOTAL	7500.00

-ITEMS OF COST-

Excavating	75.
Foundations, Brick or Stone	330.
Brickwork & Fireplaces & Paving	2060.
Flue Lining	45.
Re. Conc. Lintels & Cellar Floor	300.
Flooring & Rough Lumber	530.
Carpenters & Rough Labor	900.
Millwork	800.
Slate Roof	225.
Plastering	370.
Sheet Metal Work	125.
Steel Beam & Small Irons	30.
Plumbing	500.
Heating, Hot Water	510.
Electric Wiring	170.
Painting & Glazing	265.
Hardware & Nails	145.
Miscellaneous	100.
TOTAL	$ 7500.





-COLOR SCHEME-

House to be faced with Hy-tex "Red Rough Texture" brick - full run of kiln-laid up in Flemish Bond.

Pattern, from ground up to first story window sills, and chimney to be laid up in Hy-tex "Antique Matt" selected in varying shades, all slightly darker than the rest of the house.

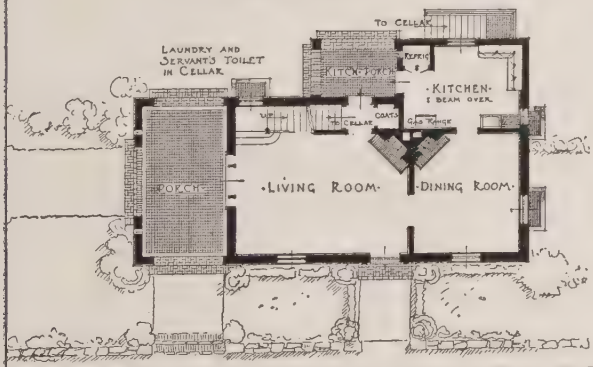
Spots of interest in the patterns to be "picked out" with Hy-tex St. Louis and Bokhara Matts.

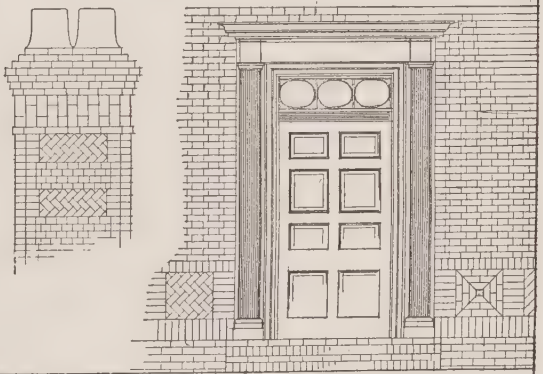
All joints to be raked.

SCALE FOR PLANS 5 10 15 20

SCALE FOR DETAILS 1 2 3 4 5 6

SCALE FOR SECTION 1 2 3 4 5 6





SUBMITTED BY

BRICK HOUSE TO COST $7,500 ~ FACED WITH HY-TEX BRICK

DESIGN BY BAYARD TURNBULL
328 North Charles Street, Baltimore, Md.

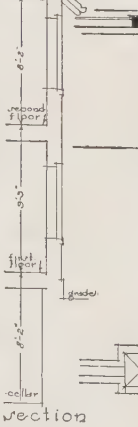
CUBAGE (HOUSE ONLY) 39'X25X32'=32644 cu ft
" VERANDA 25'X10'X14'-4"= 833 "
" TOTAL 33474 "
33474 cu ft @ 22¢ A CUBIT FOOT =$7,364.30

EXCAVATION	$ 150.00	PLUMBING	= 350.00
FOUNDATION	= 450.00	ELEC WIRE	= 150.00
MASONRY	= 3,500.00	ALLOWANCES	= 200.00
CARPENTRY	= 2,500.00	MISCELL	= 200.00
HEATING	= 200.00	TOTAL	= $7,500.00

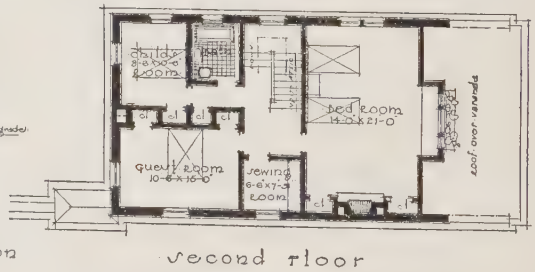
Range of Bokhara bricks to be used. Bonded every four courses.
one half inch scale detail of front entrance

SUBMITTED BY

first floor.
scale 1/8 in = 1 ft



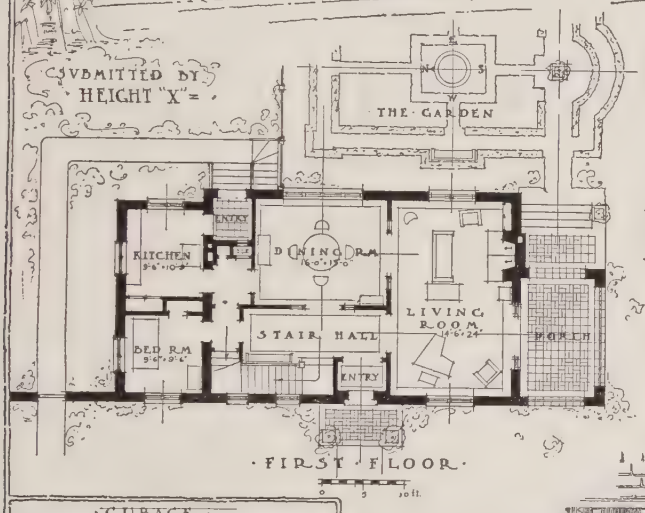
section

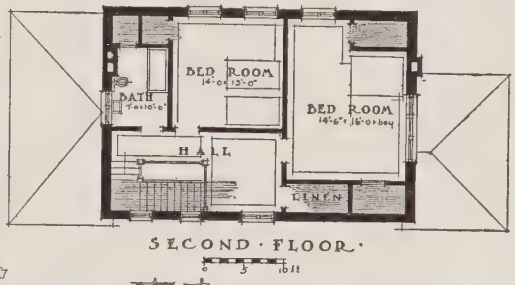


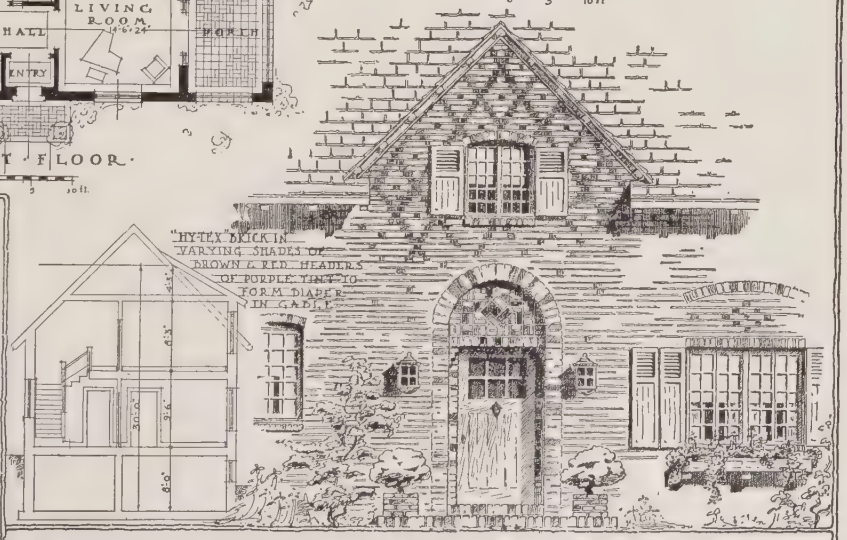
second floor

BRICKBUILDER COMPETITION
A BRICK HOUSE TO COST $7,500

DESIGN BY RALPH T. WALKER
1104 Franklin Street, Melrose Highlands, Mass.







CUBAGE

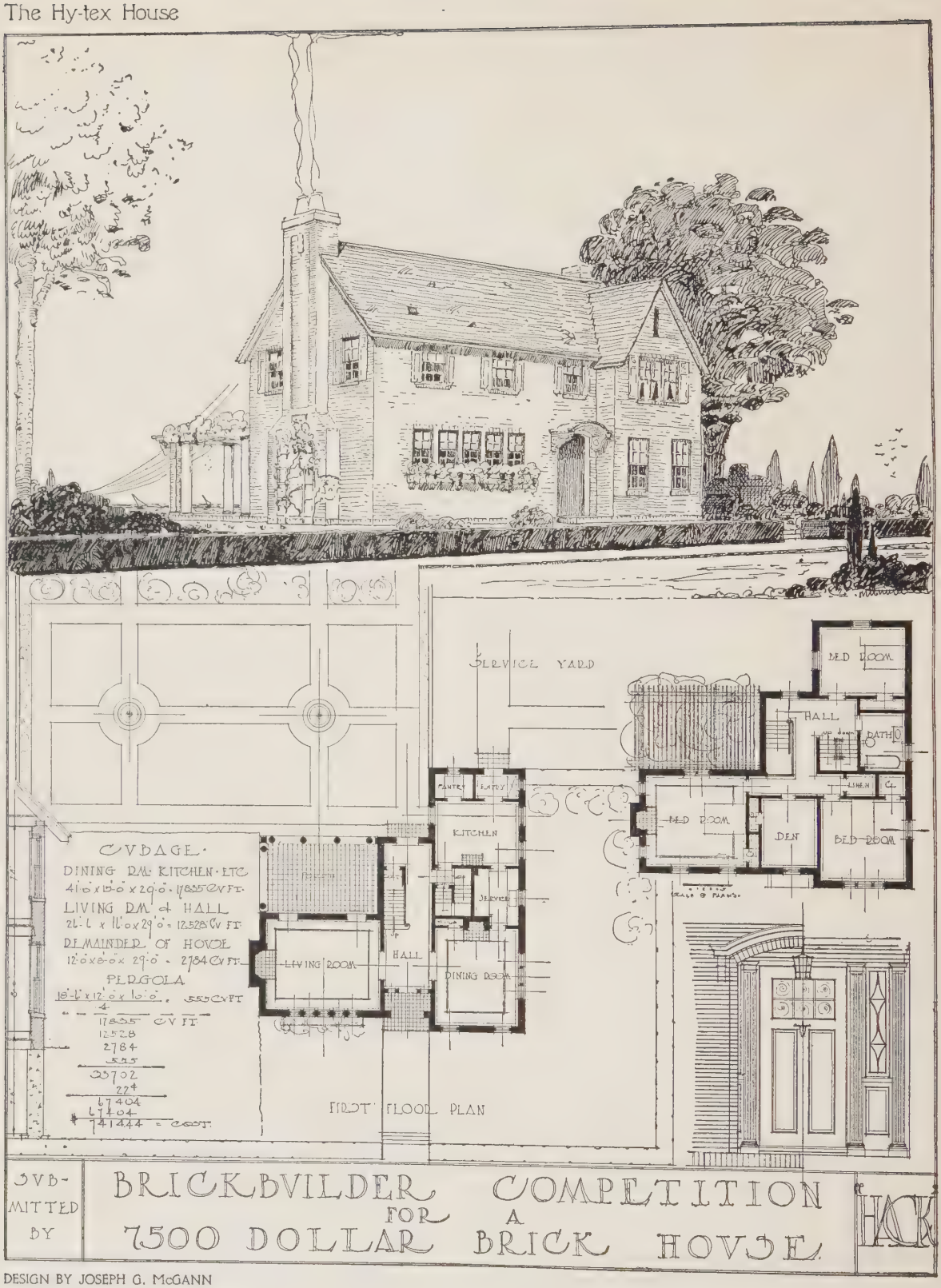
MAIN PORTION 38½ · 26 · 30 =	30050
SERVICE WING 25 · 10½ · 12½ ·	3281¼
PORCH 17 · 10½ · 12½ ·	558
TERRACES & STEPS	125
TOTAL	33994¼
AT 22¢ COST · $7478.74	

ITEMS

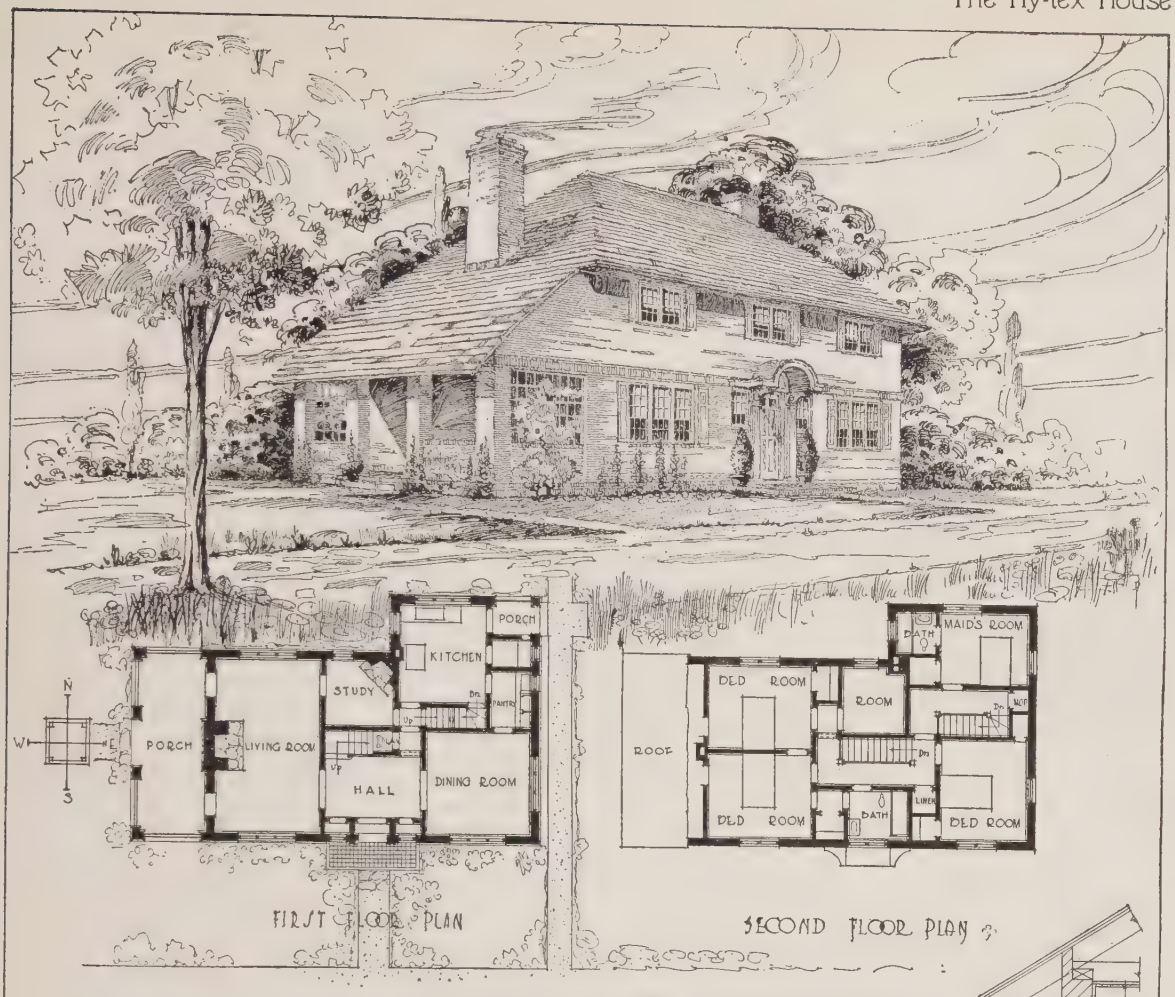
EXCAVATING	$ 95
CONCRETE & CEMENT	450
BRICK	1490
SHEET METAL	95
SLATE	390
CARPENTRY	1580
MILL & STAIRS	1015
PLASTER	500
PAINT, STAIN & GLAZING	450
HARDWARE & FIXTURES	180
PLUMBING	550
WIRING	100
MISCELLANEOUS	100
COMISSION 10%	679.50
TOTAL COST	$7474.50

A HY-TEX HOUSE TO COST $7500.00

DESIGN BY HENRY WILLIAM HALL
408 Board of Education Building, St. Louis, Mo.

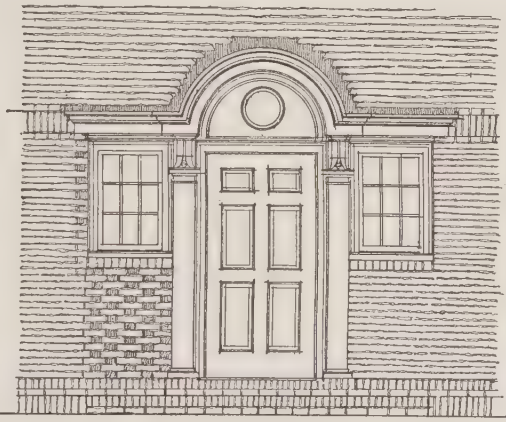


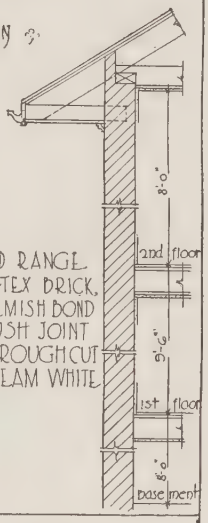
DESIGN BY JOSEPH G. McGANN
111 Devonshire Street, Boston, Mass.



CUDICAL CONTENTS

MAIN PORTION
23'-6" x 42'-0" x 30'-0" = 29,610
KITCHEN PORTION
7'-0" x 18'-6" x 30'-0" = 3,885
LIVING ROOM PORCH
23'-6" x 9'-0" x 10'-0" [25%] 529
TOTAL CUDIC FEET 34,024
AT 22 CENTS A
CUDIC FOOT
EQUALS $7,486.





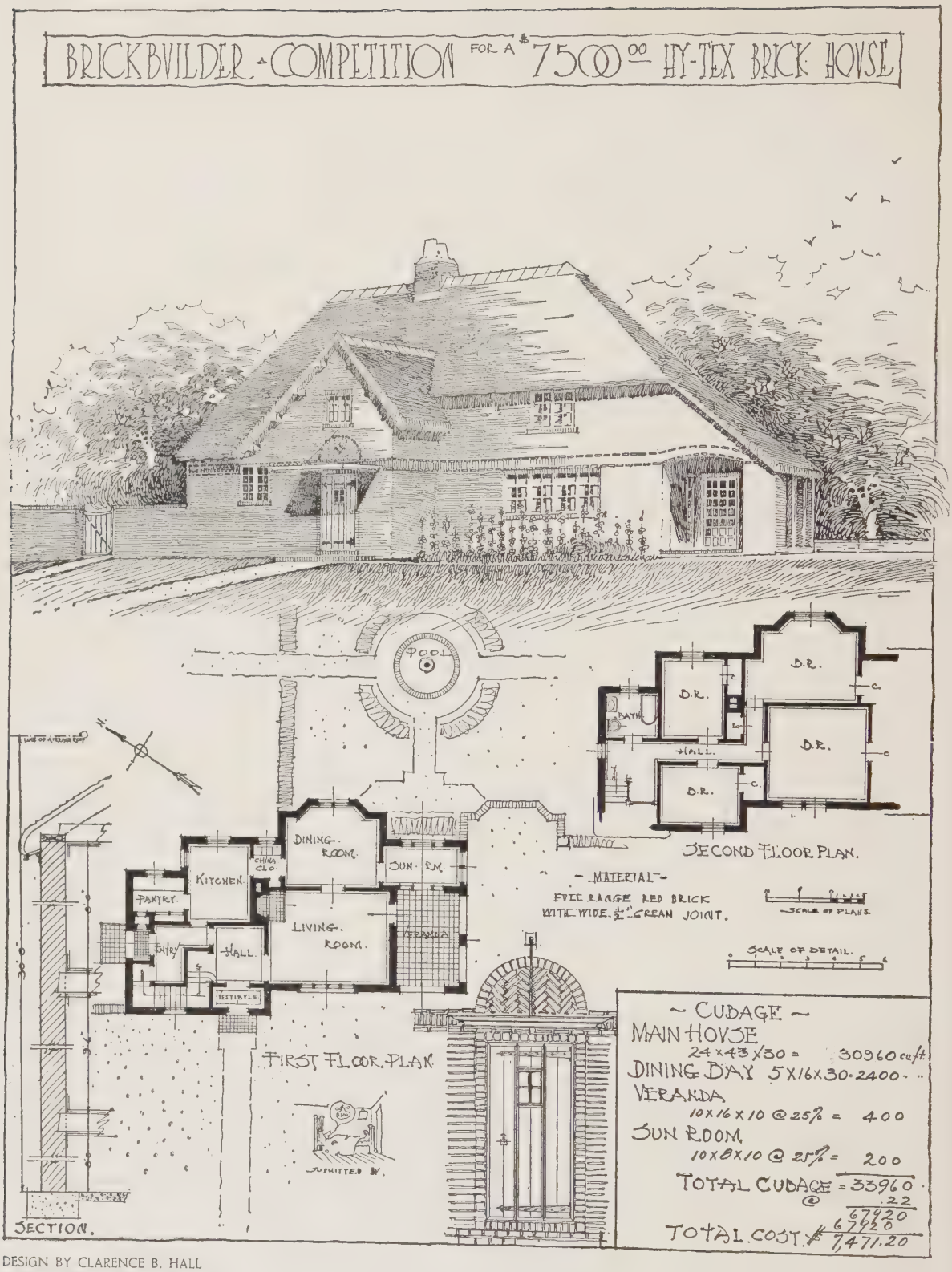
RED RANGE
HY-TEX BRICK,
FLEMISH BOND
FLUSH JOINT
½" ROUGH CUT
CREAM WHITE

SCALE OF PLANS
5 10 15

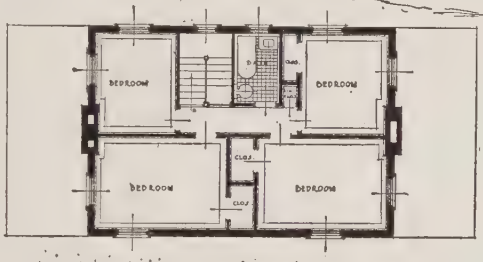
COMPETION FOR A BRICK HOUSE TO COST $7,500

SUBMITTED BY

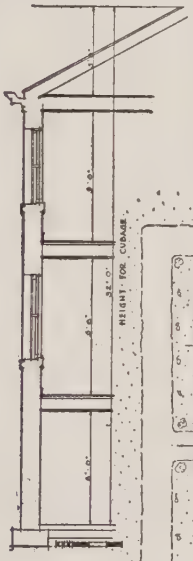
DESIGN BY HENRY E. McCLAY AND W. P. CALLAHAN
93 Federal Street, Boston, Mass.

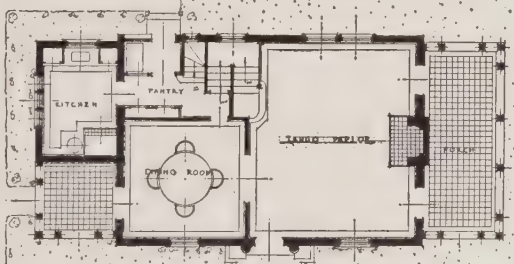


DESIGN BY CLARENCE B. HALL
93 Federal Street, Boston, Mass.

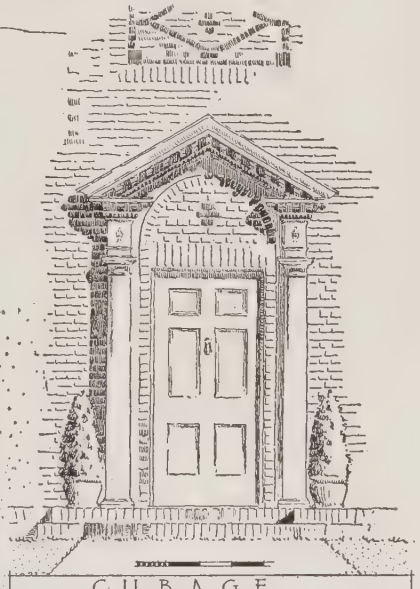


SECOND FLOOR PLAN





FIRST FLOOR PLAN



CUBAGE		
MAIN HOUSE	38 X 26 X 32 = 31616 CU. FT X 22 CTS.	6955.52
MAIN PORCH	(25 X 10 X 10) ÷ 4 = 650 CU. FT. X 22 CTS.	137.50
DINING PORCH	(10 X 10 X 10) ÷ 4 = 250 CU. FT. X 22 CTS.	55.00
KITCHEN EXT.	10 X 15 X 10 = 1500 CU. FT X 22 CTS.	330.00
	TOTAL COST	7478.02

SUBMITTED BY

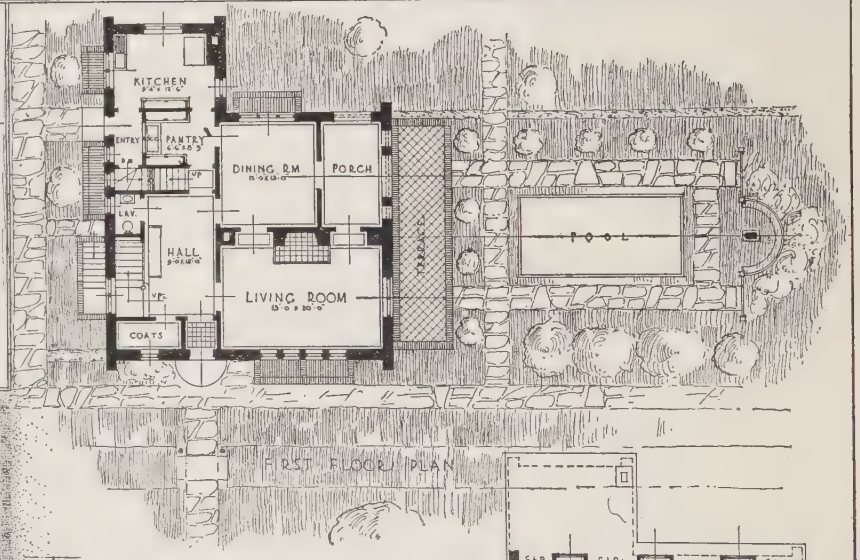
$7500. HY-TEX BRICK HOUSE

DESIGN BY AUGUST STEINKE AND OSCAR J. ARNEMANN
101 Park Avenue, New York, N. Y.

CUBAGE & COSTS

MAIN BODY OF HOUSE 35'-8" X 30'-6" X 30'-0" IN HEIGHT = 32640 CU. FEET
KITCHEN WING 15'-4" X 11'-0" X 14'-0" IN HEIGHT = 2366 CU. FT. TERRACE 28'-6" X 7'-6" X 3'-0" ÷ 4 = 153 CU. FT. SUBTRACTING 1600 CU. FT. FOR UNEXCAVATED PORTION UNDER LIVING ROOM VESTIBULE & COAT CLOS. EQUALS 33559 CU. FT. X 22 = $7383.00 COST

EXCAVATION	150	HEATING	650
PLASTERING	400
MASONRY	2700	PLUMBING	550
SHEET METAL	150
LUMBER	900	WIRING	100
LIGHT FIXTURES	150
CARPENTRY	550	R. HARDWE	100
GAS PIPING	100
MILL WORK	500	F. HARDWE	150
PAINTING ETC	250
$100 ALLOWANCE			



FIRST FLOOR PLAN

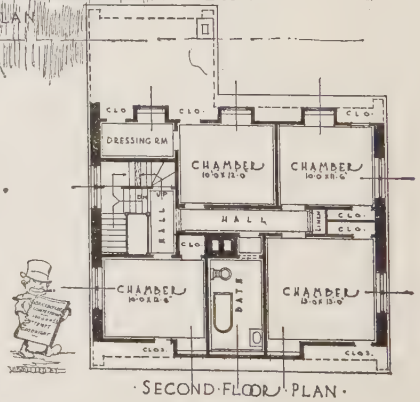
FRONT ENTRANCE DETAIL

COMPETITION
FOR A
HYTEX BRICK HOUSE
GIVEN BY
THE BRICKBUILDER

SCALE FOR PLANS

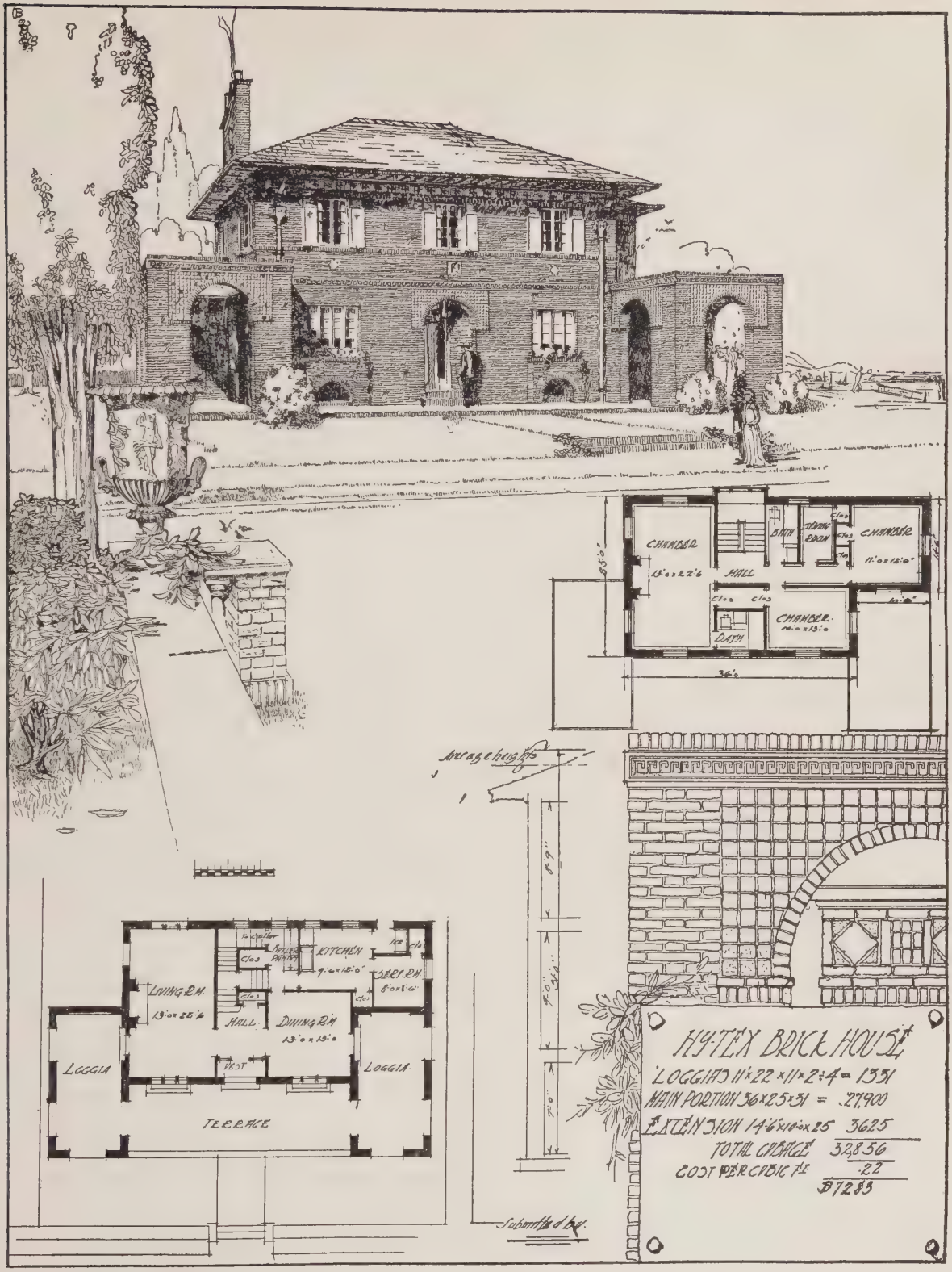
SCALE FOR DETAIL

BRICK TO BE LIGHT RED WITH ALTERNATE HEADERS OF THE DARKER SHADES SELECTED AT RANDOM. STRONGEST COLORS TO BE USED IN GABLE ENDS. ROOF TO BE SILVER GRAY. WOODWORK WHITE. WALKS OF LOCAL FIELD STONE.

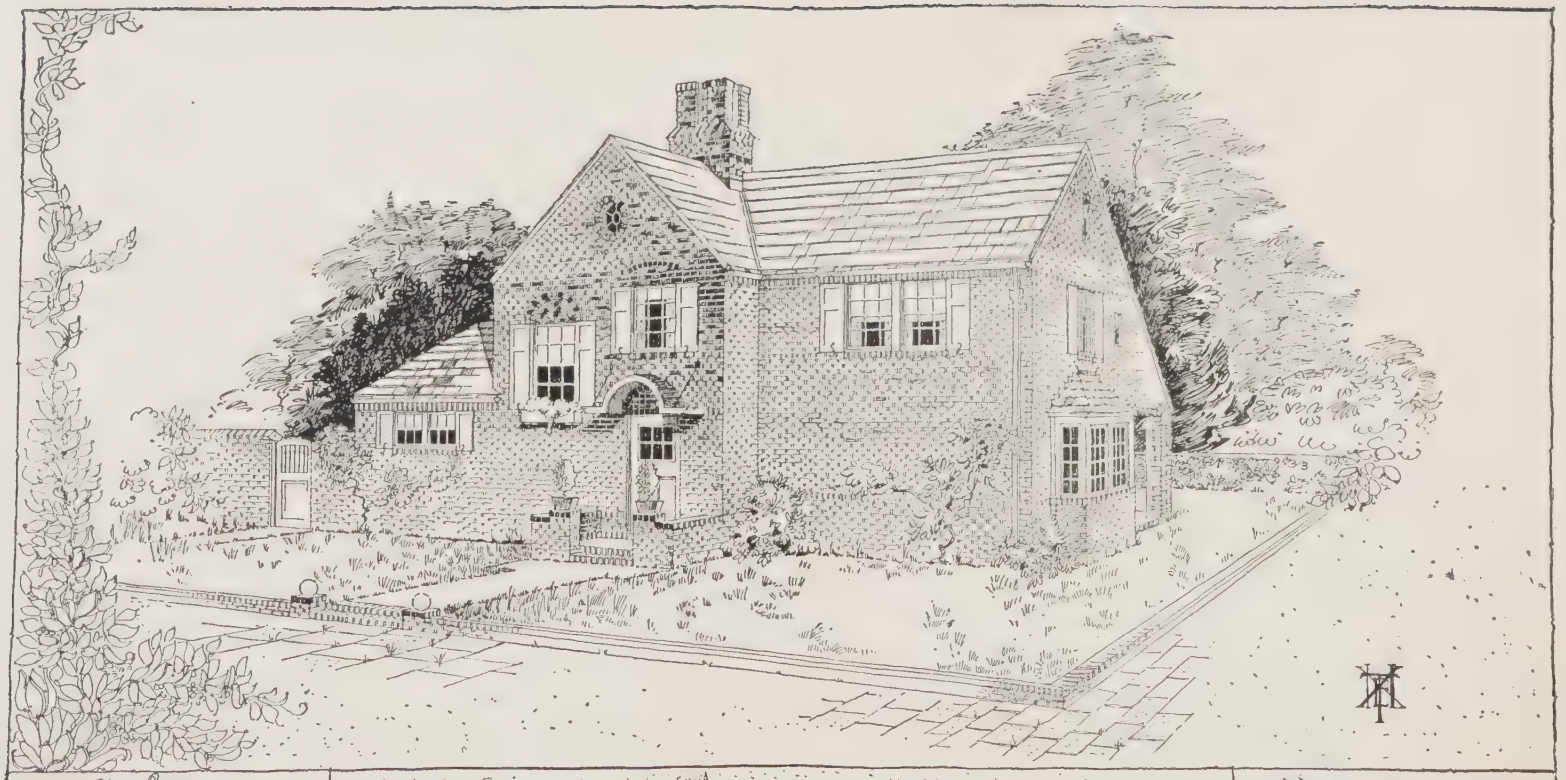


SECOND FLOOR PLAN

DESIGN BY LEWIS P. MACKENZIE AND WARNER A. EBBETS
5750 Pine Street, Philadelphia, Pa.



DESIGN BY EMIL H. KLEEMAN
23 North 22d Street, Irvington, N. J.

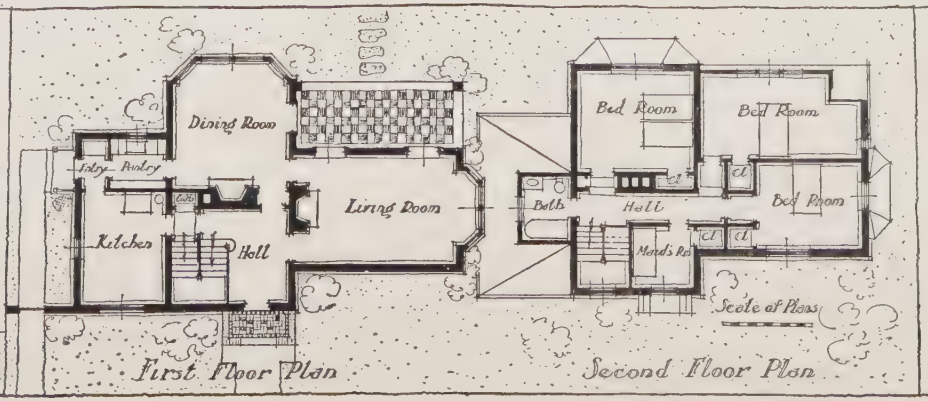


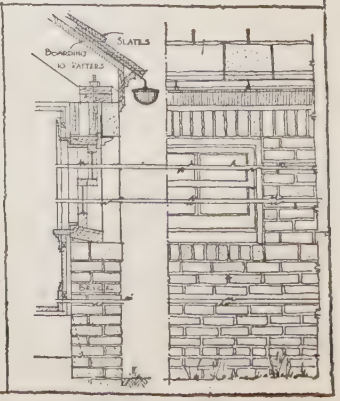
Cubage

This cubage is taken in three parts

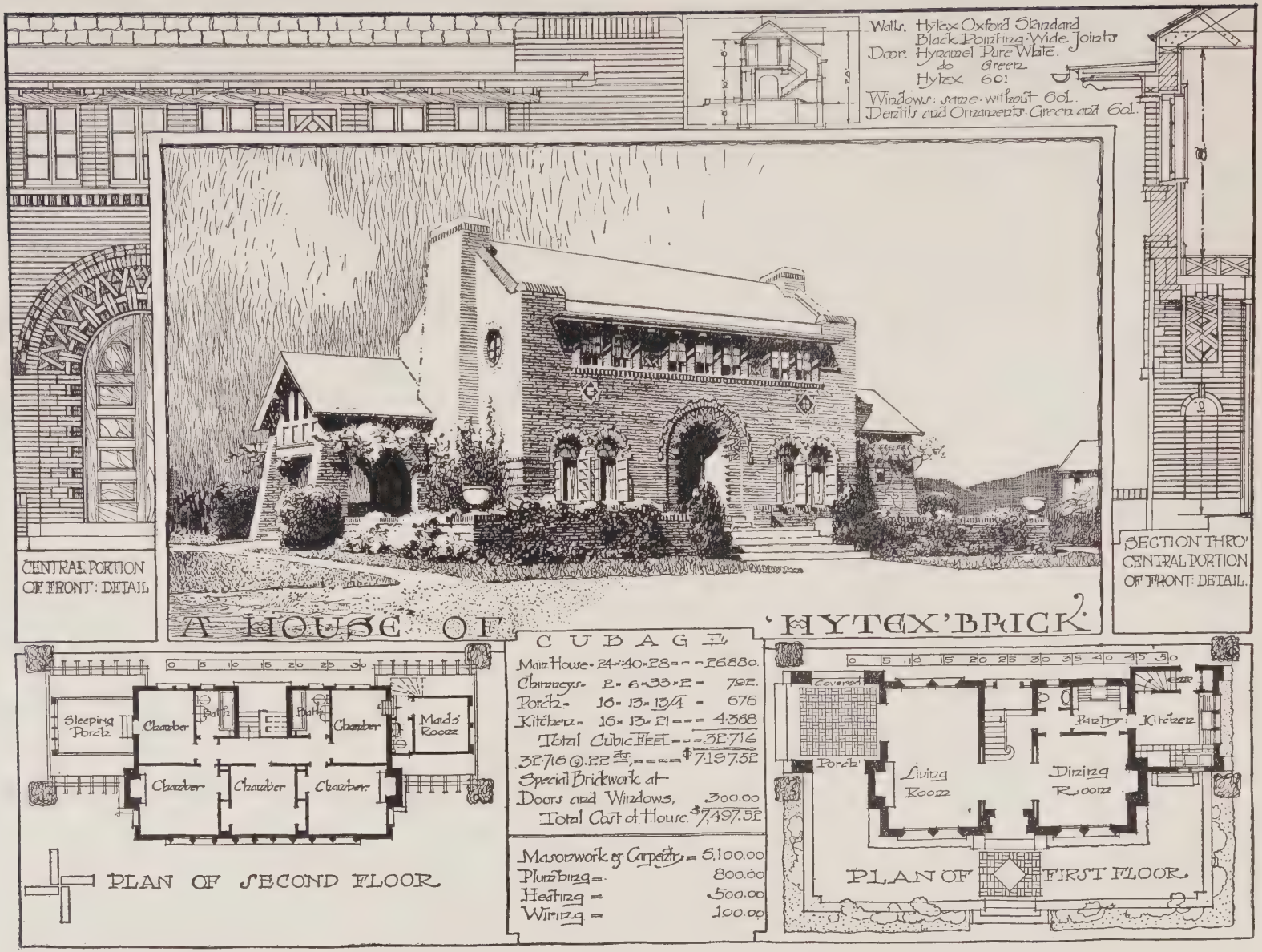
Living Rm portion - 6500
Bed Rooms over L.R. 5000
Centre D.R. Portion 15800
Kitchen Wing - 3800
Porches - 520

Making a total of 31120 cubic ft

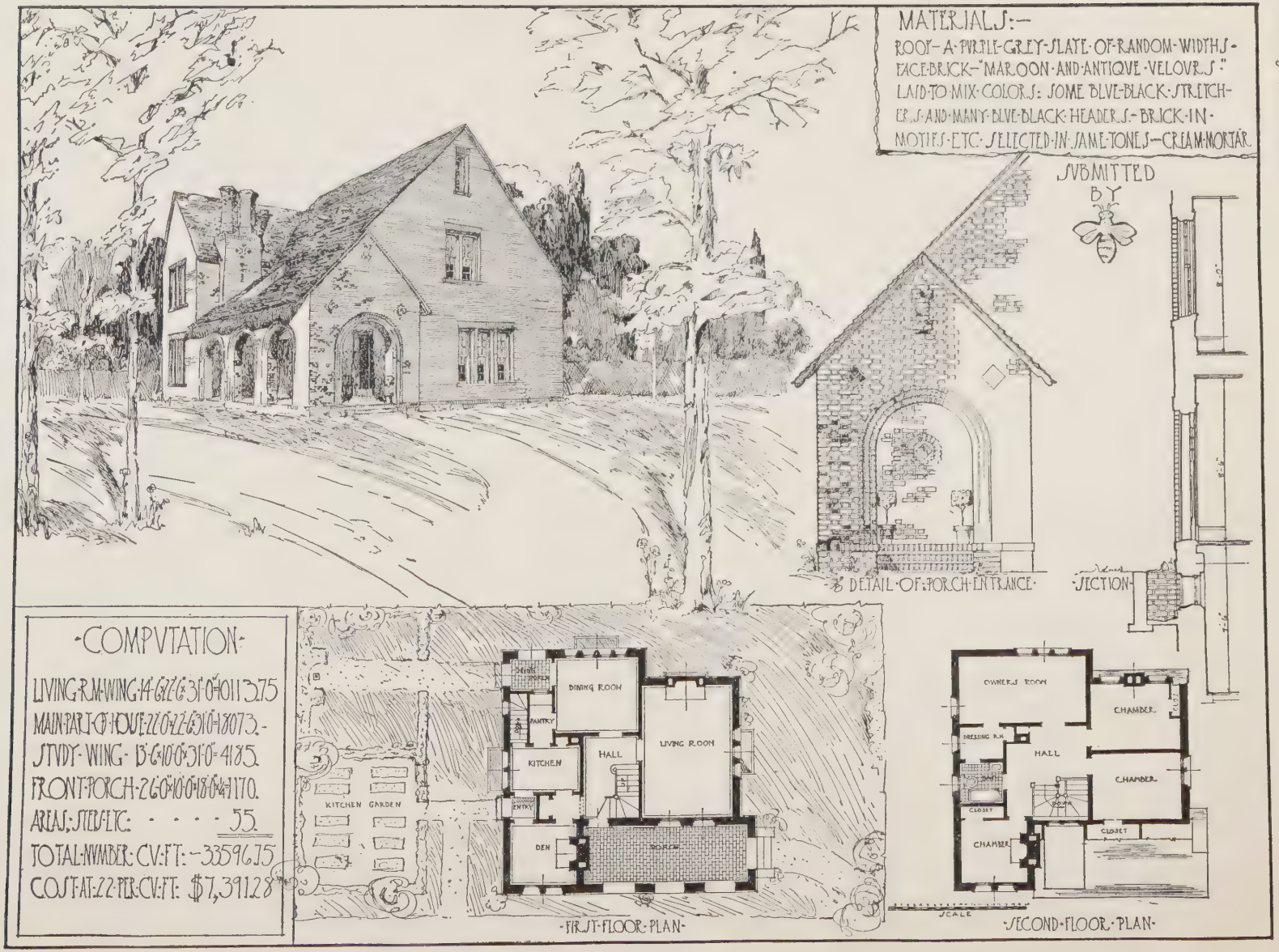




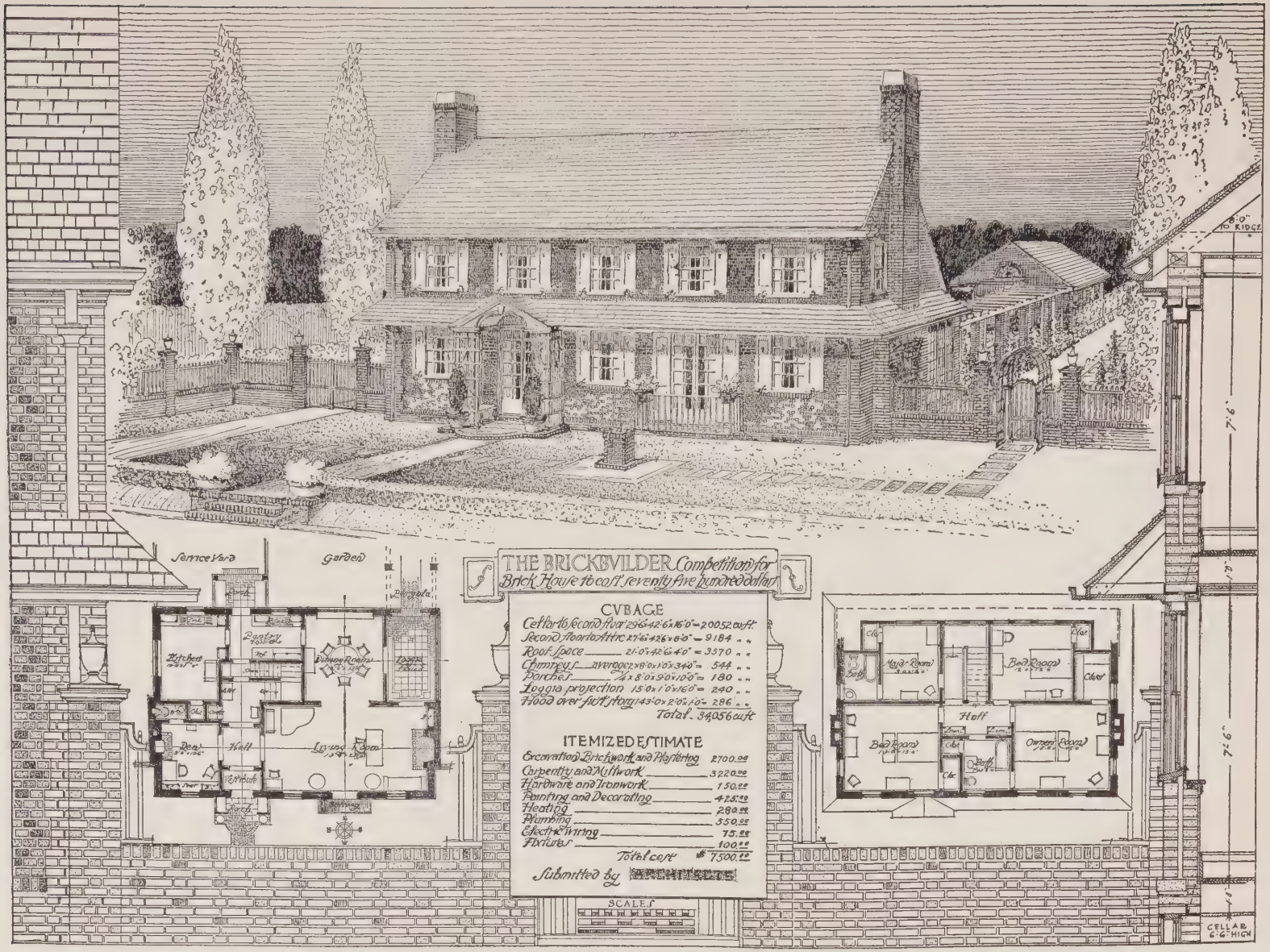
DESIGN BY GEORGE F. BLOUNT
110 State Street, Boston, Mass.



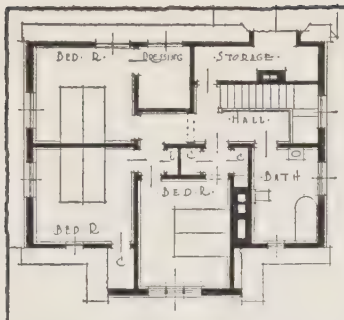
DESIGN BY ALFRED MORTON GITHENS
452 Fifth Avenue, New York, N. Y.



DESIGN BY WELLS I. BENNETT
626 East University Avenue, Ann Arbor, Mich.



DESIGN BY DAVIS, McGRATH AND KIESSLING
175 Fifth Avenue, New York, N. Y.



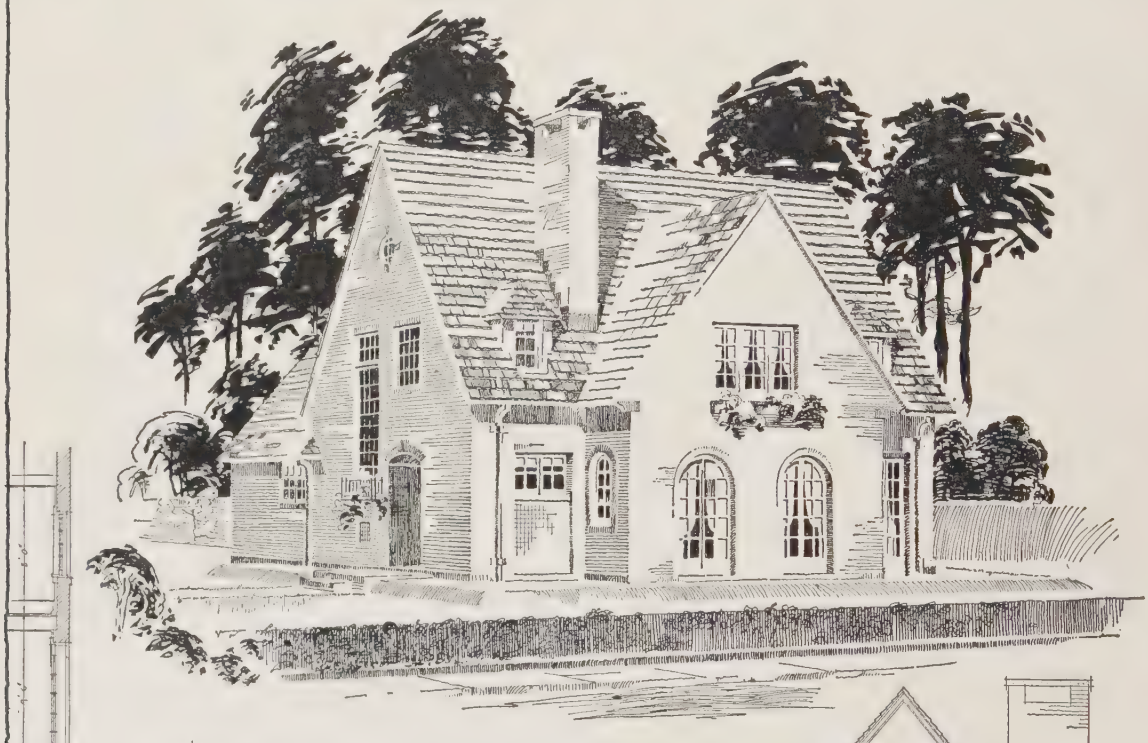
SECOND · FLOOR

SCALE — OF DRAWINGS
DETAILS 0 1 2 3 4 5 6
PLANS 0 1 2 3 4 10

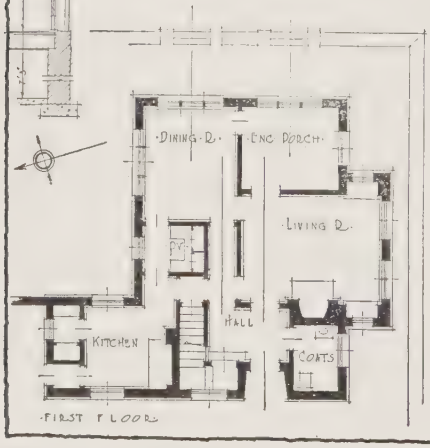
BRICKBUILDER·COMPETITION
FOR·A·HYTEX·BRICK·HOUSE

MAIN·GABLE	26¾X37½X30	= + 29674
FRONT ·	5½X19X27	= + 2835
REAR ·	11X12X21	= + 2772
UNEXCAVATED·PART	11X13X5½X2	= − 1572
TOTAL		= 33709
COST=33709X.22		= $7416

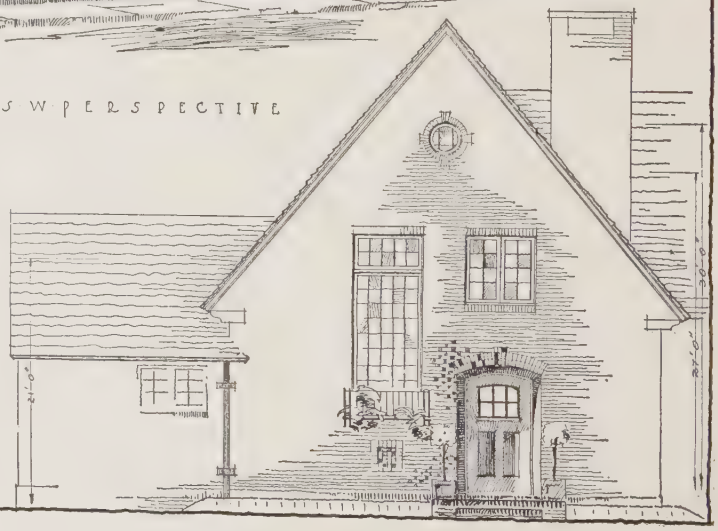
SUBMITTED·BY·S·W·PERSPECTIVE·



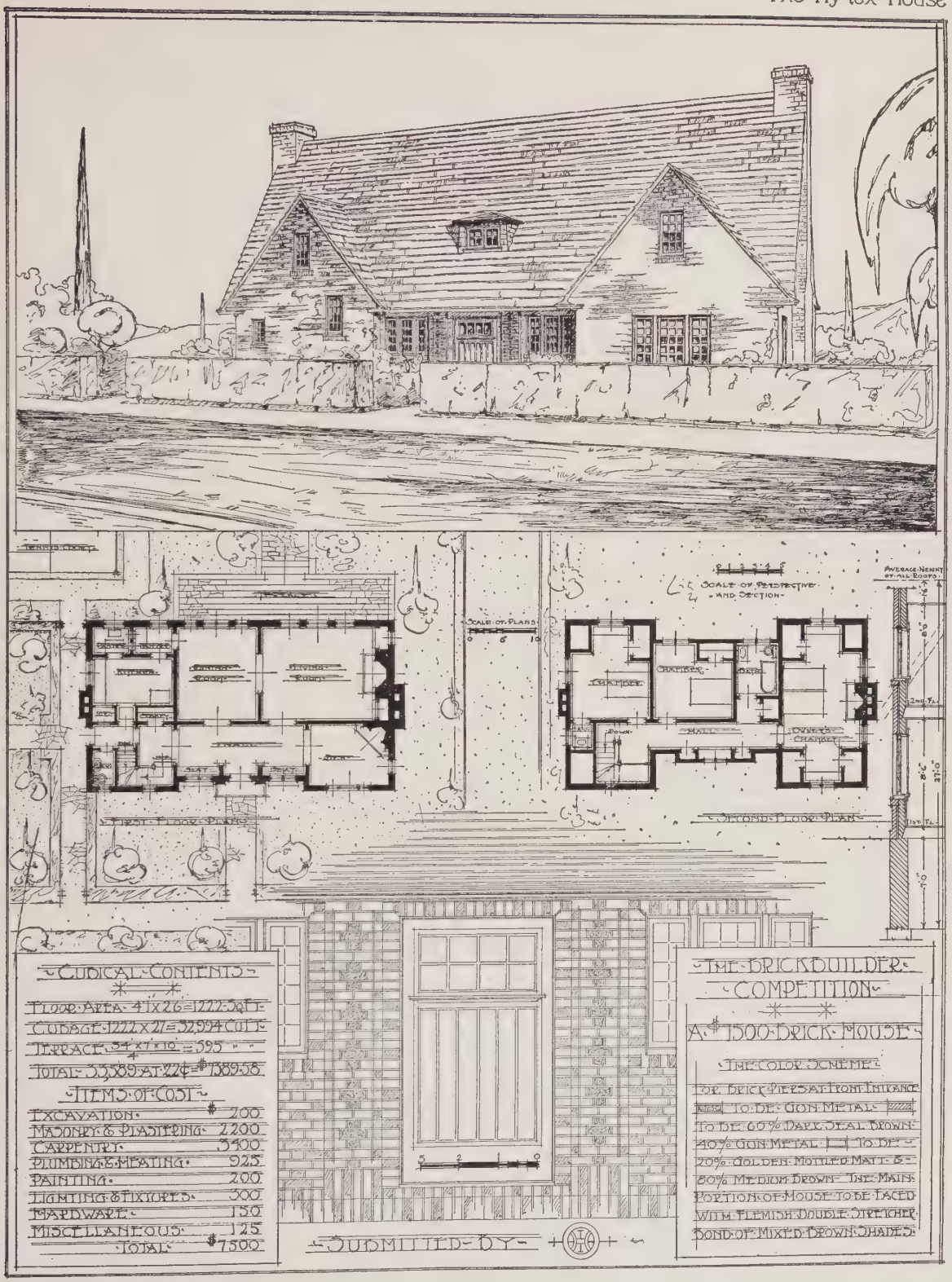
S W PERSPECTIVE



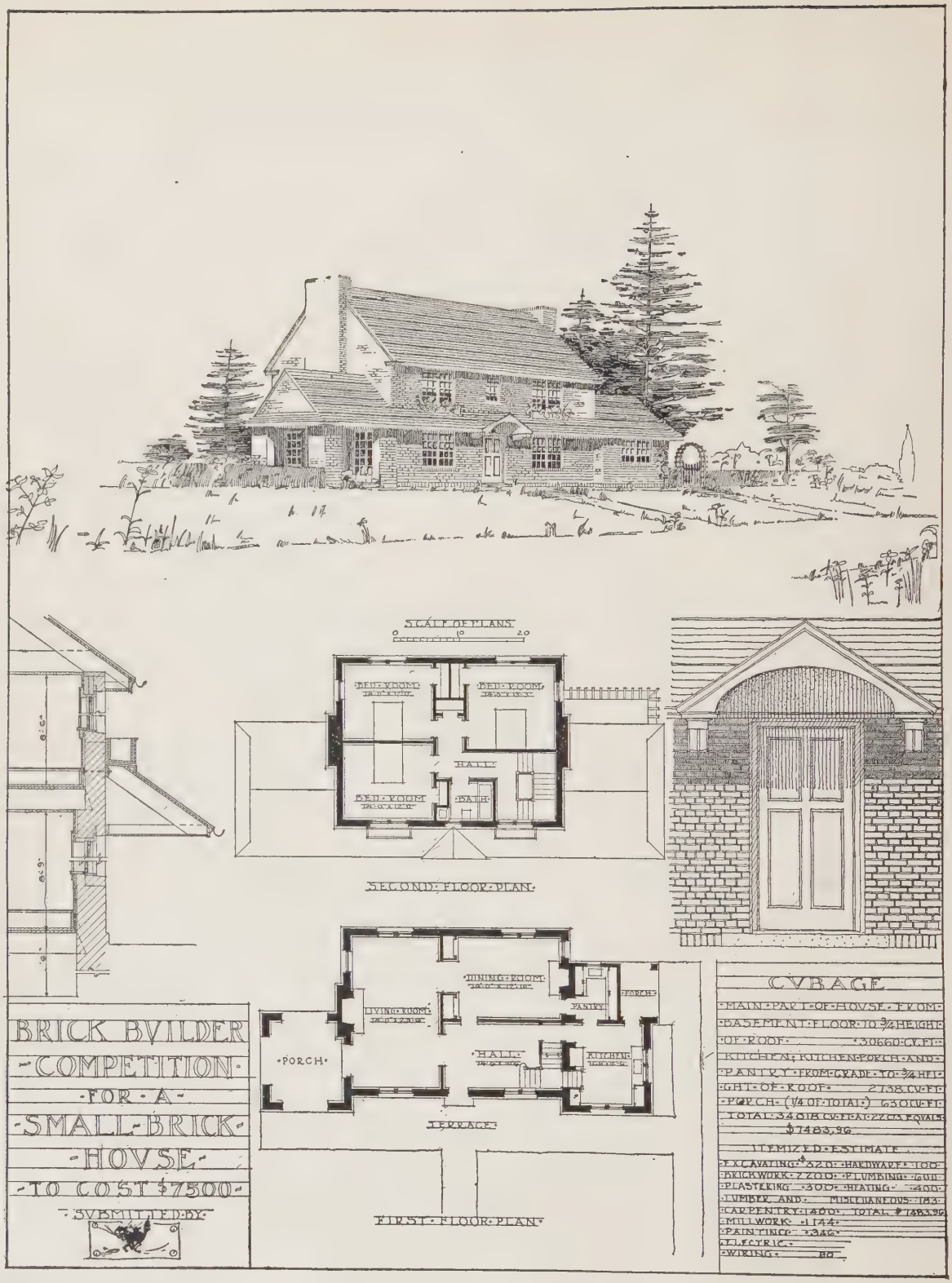
FIRST FLOOR



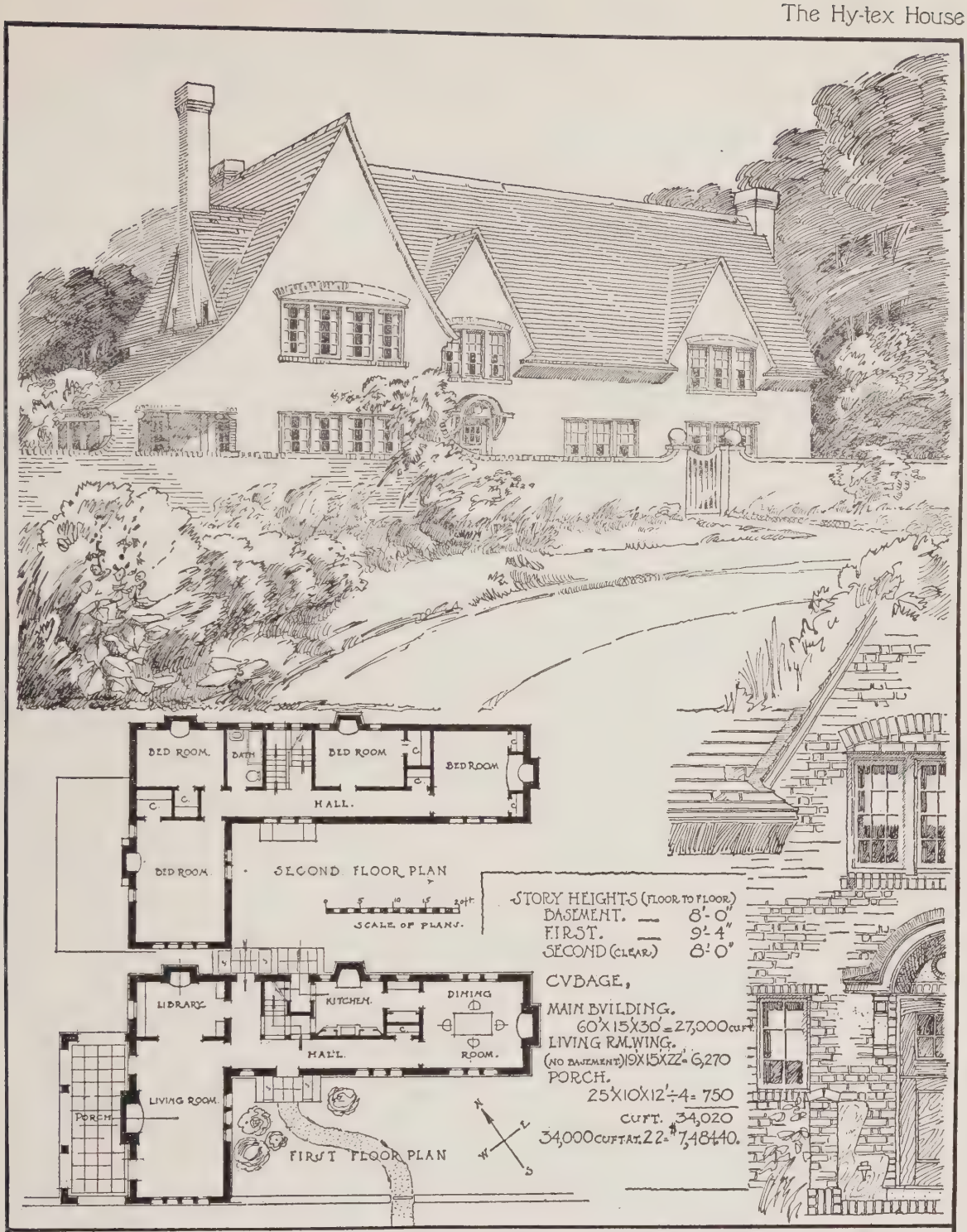
DESIGN BY H. W. PEEBLES
Building Department, City Hall, Seattle, Wash.



DESIGN BY OSBORNE H. GRAVES
Maugus Inn, Wellesley Hills, Mass.



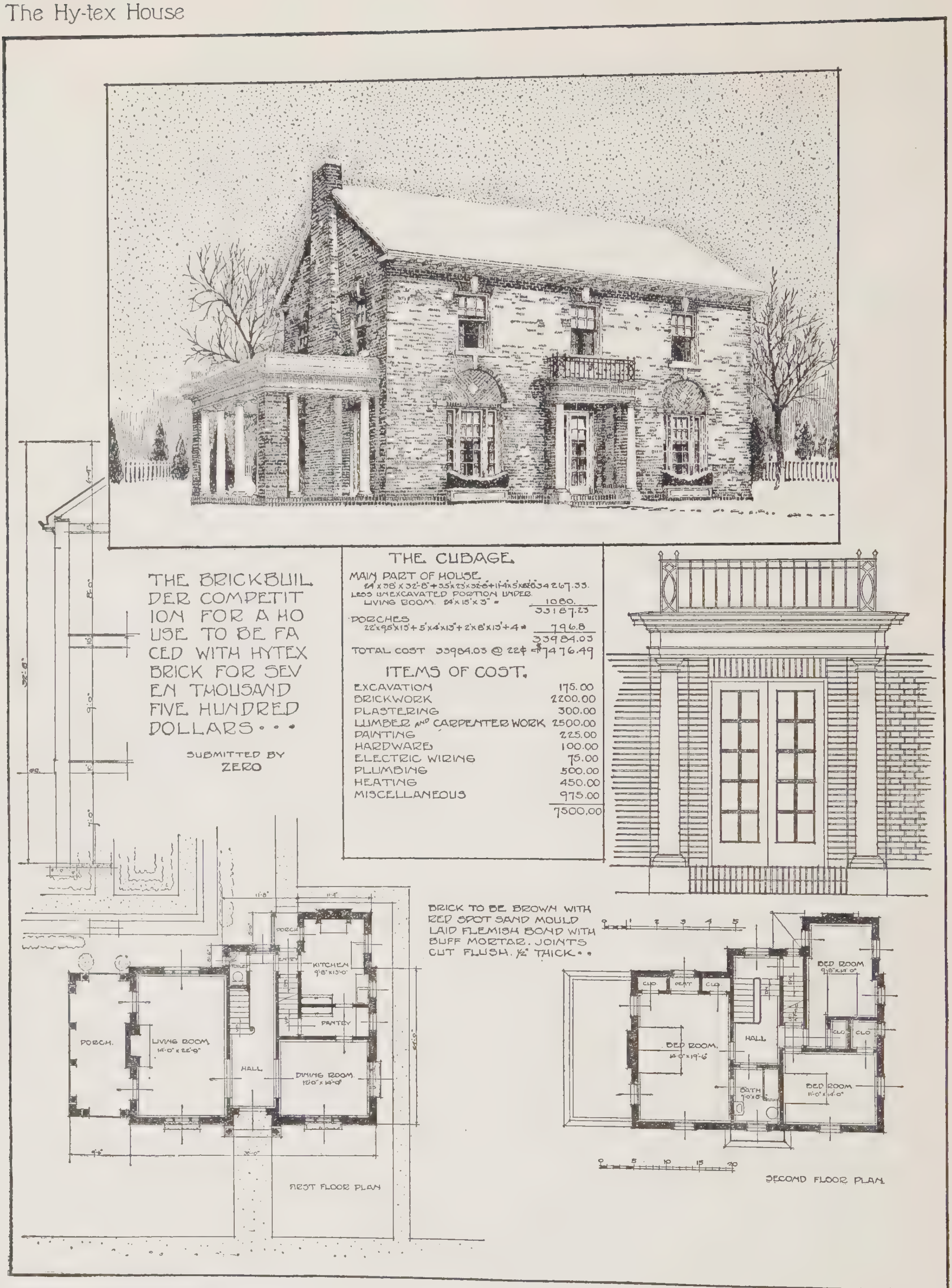
DESIGN BY F. G. BRUTON
Forbes and Halket Streets, Pittsburg, Pa.



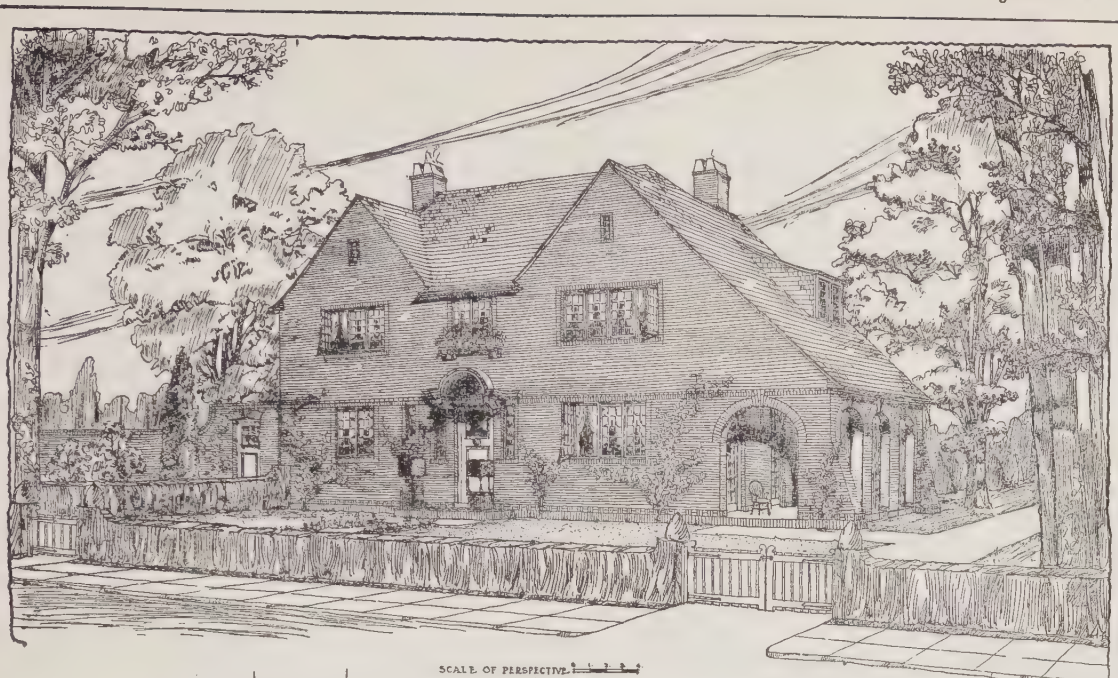
SUBMITTED BY.

COMPETITION FOR A BRICK HOUSE TO COST SEVENTY FIVE HUNDRED DOLLARS.

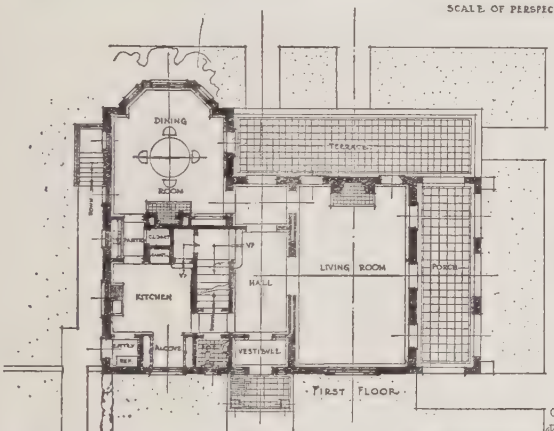
DESIGN BY NORMAN BIARD BAKER
16 Ingram Street, Forest Hills Gardens, L. I., N. Y.



DESIGN BY H. PHILLIP BARTLETT
824 North Tacoma Avenue, Indianapolis, Ind.

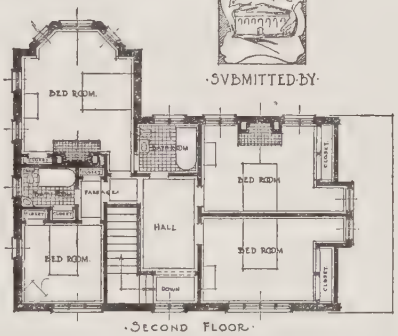


SCALE OF PERSPECTIVE



FIRST FLOOR

SCALE FOR PLANS

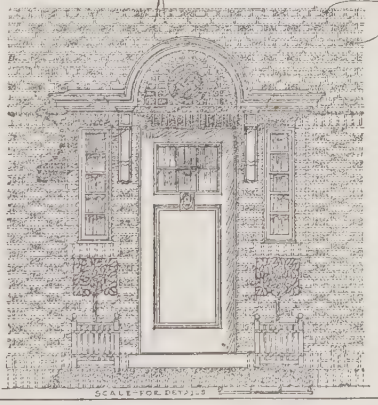


SECOND FLOOR

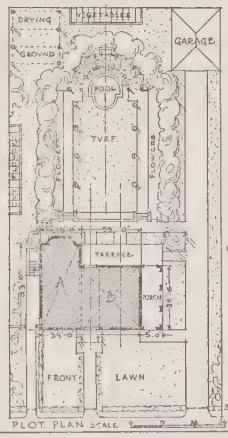
SUBMITTED BY

CUBAGE
SEE PLOT PLAN
NOTE - BASEMENT ONLY
UNDER SECTION MARKED
"A" 16×33×31 HIGH = 16368 CU FT
SECTION MARKED
"B" 23×24.5×25 HIGH = 14088 "
PORCH 8×24.5×12 = 2352 "
BAY WINDOW 3×10×20 = 600 "
MISCELLANEOUS = 682 "
TOTAL — 34090 "
34090 AT $.22 CU. FT. $7500

COLOR SCHEME—HOUSE TO BE FACED WITH RED BOKHARAS WITH STEEL BLACK HEADERS



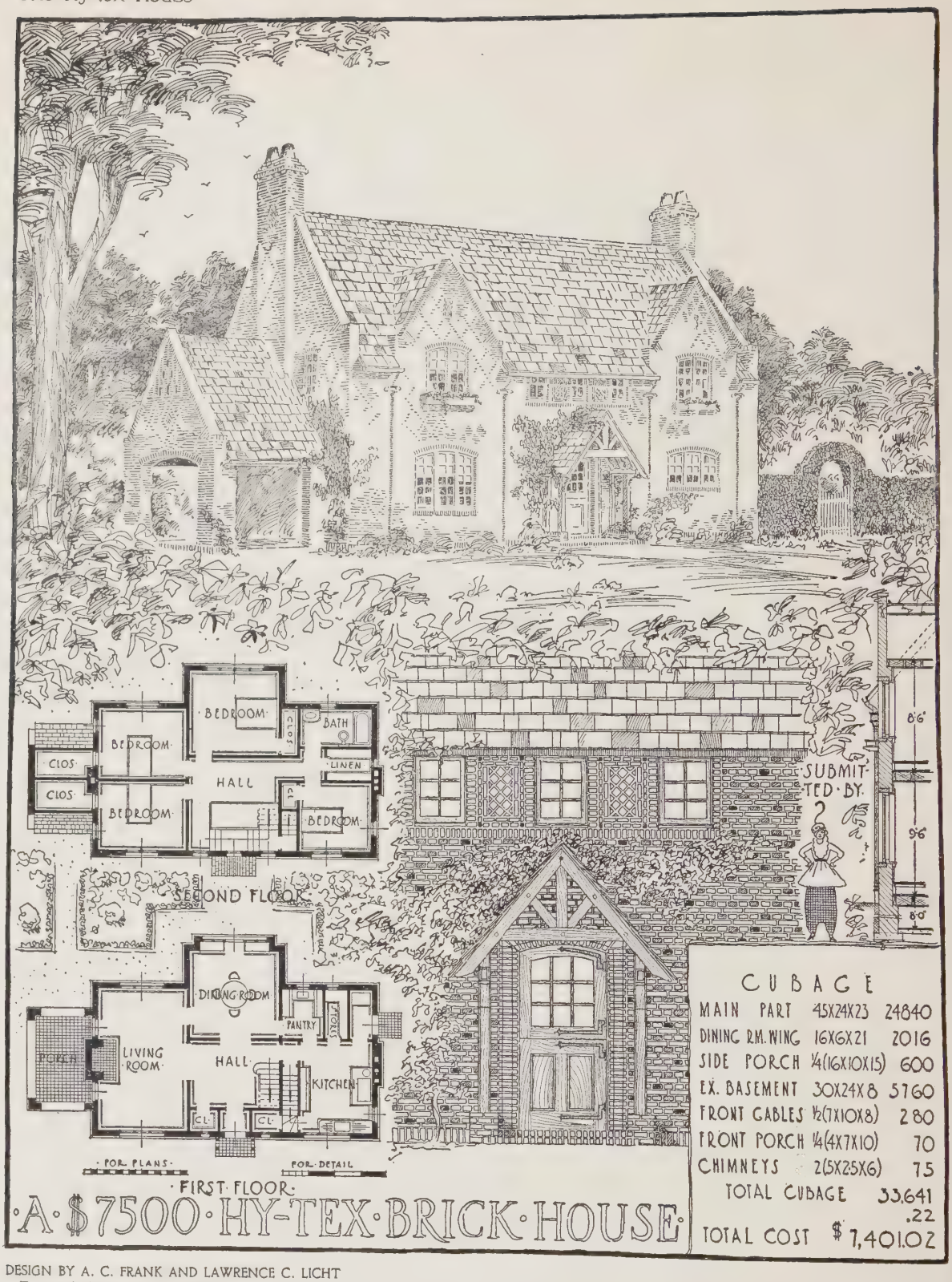
SCALE FOR DETAILS



PLOT PLAN SCALE

COMPETITION FOR A HY-TEX BRICK HOUSE TO COST $7500

DESIGN BY CLARENCE M. BOGIA
5833 Washington Avenue, West Philadelphia, Pa.

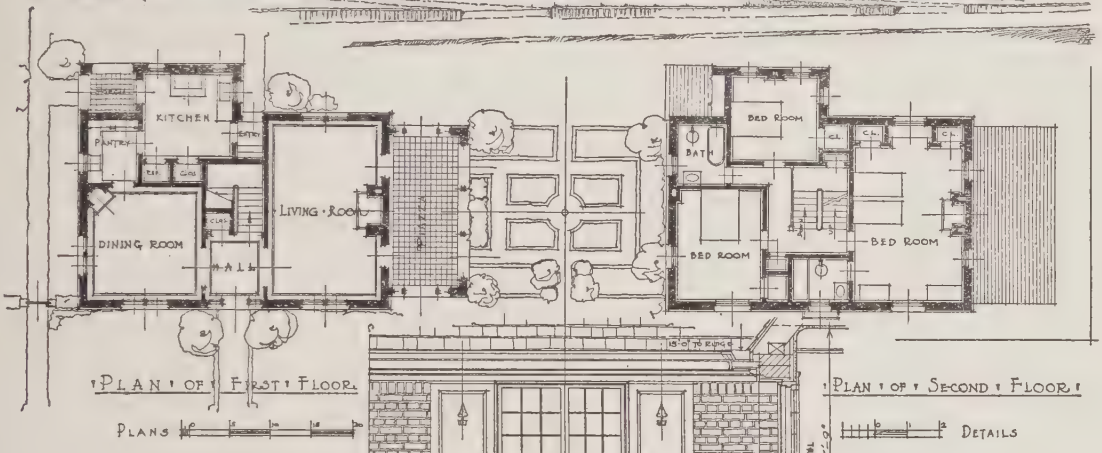


A $7500 HY-TEX BRICK HOUSE

CUBAGE		
MAIN PART	45X24X23	24840
DINING RM. WING	16X6X21	2016
SIDE PORCH	¼(16X10X15)	600
EX. BASEMENT	30X24X8	5760
FRONT GABLES	½(7X10X8)	280
FRONT PORCH	¼(4X7X10)	70
CHIMNEYS	2(5X25X6)	75
TOTAL CUBAGE		33,641
		.22
TOTAL COST		$ 7,401.02

DESIGN BY A. C. FRANK AND LAWRENCE C. LICHT
4 East 39th Street, New York, N. Y.

SUBMITTED BY



PLAN OF FIRST FLOOR

PLAN OF SECOND FLOOR

PLANS

DETAILS

CUBAGE

MAIN PART	24'x38'x33.5'	=	30,552
REAR WING	6'x13'x29'	=	2,262
PIAZZA	10'x21'x14'÷4	=	735
PORCH	6'x7'x16'÷4	=	168
TOTAL CUBIC FEET			33,717
AT 22¢ PER CUBIC FT.		=	$7,417.74

ITEMIZED COST

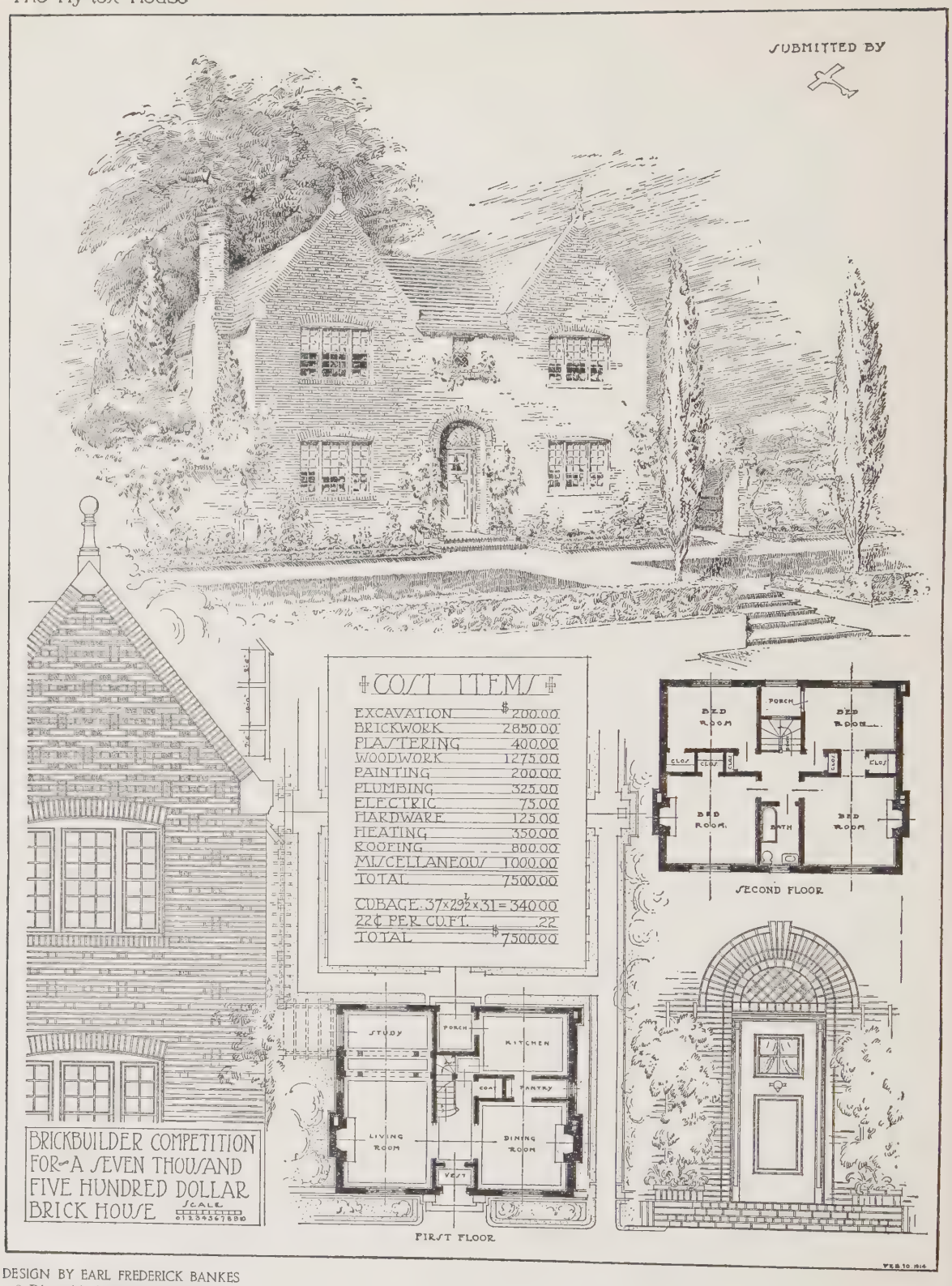
EXCAVATION	$ 200.00
MASON	2,530.00
CARPENTER	2,637.00
HARDWARE	185.00
PAINTING	350.00
PLUMBING & METAL WORK	900.00
HOT AIR HEATING	425.00
ELECTRIC WORK	190.00
TOTAL	$ 7,417.00

BRICKBUILDER COMPETITION

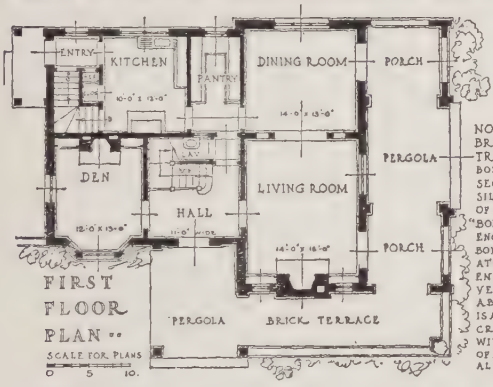
A BRICK HOUSE TO COST $7,500. WALLS FACED WITH HY-TEX BRICK

BRICK TO BE "BOKHARA" IN FULL RUN OF SHADES LAID WITH 5/8" FLUSH JOINTS

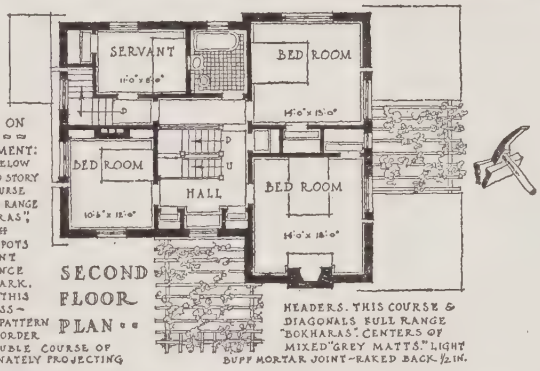
DESIGN BY LE ROY BARTON AND WALTER McQUADE
479 Madison Street, Brooklyn, N. Y.



DESIGN BY EARL FREDERICK BANKES
548 Riverside Drive, New York, N. Y.



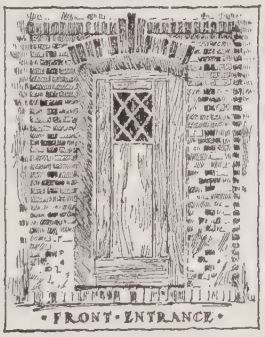
NOTES ON BRICK TREATMENT: BODY BELOW SECOND STORY SILL COURSE OF FULL RANGE "BOKHARAS", ENGLISH BOND, SPOTS AT FRONT ENTRANCE VERY DARK, ABOVE THIS IS A CRISS-CROSS PATTERN WITH BORDER OF A DOUBLE COURSE OF ALTERNATELY PROJECTING



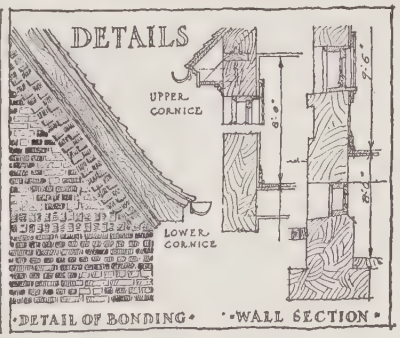
HEADERS. THIS COURSE & DIAGONALS FULL RANGE "BOKHARAS". CENTERS OF MIXED "GREY MATTS." LIGHT BUFF MORTAR JOINT-RAKED BACK ½ IN.

COST DATA

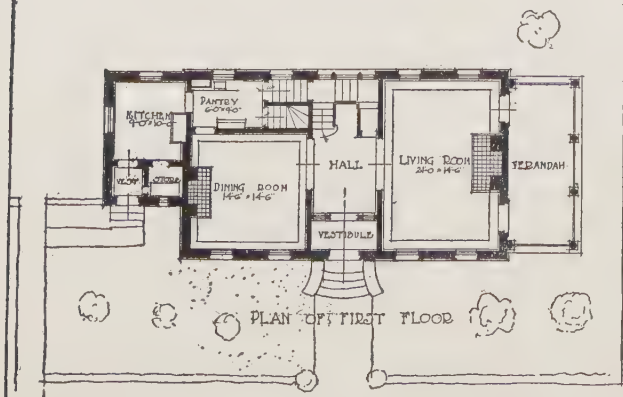
MATERIALS & LABOR		CUBIC CONTENTS	
EXCAVATING	150	BASEMENT UNDER	
BRICK & MASONRY	1800	23'x27' PORTION	4968
MILL WORK	1430	EXCAVATED SPACE	
PLUMBING	610	UNDER 16'x21'	
CARPENTRY & LUMBER	1700	PORTION	1984
HEATING	450	FIRST STORY	10606
PLASTERING	590	SECOND STORY	8936
ELECTRIC LIGHTING	200	ATTIC & ROOFS	5680
HARDWARE & METAL	350	PORCHES & TERRACE	1492
PAINTING	300	TOTAL CUBAGE	33666
MISCELLANEOUS	220	PER CUBIC FT	.22
COST COMPLETE	$7,500	TOTAL COST	$7417.52



·FRONT·ENTRANCE·



DESIGN BY FRANK SOHN
Lyons, Iowa



PLAN OF FIRST FLOOR

SCHEDULE OF COST

MAIN HOUSE
40'-0" × 23'-0" × 33'-0" 30360 cbf
KITCHEN WING
16'-0" × 9'-6" × 18'-0" = 2736 cbf
VERANDAH
21'-6" × 9'-0" × 16'-0" × .4 = 776 cbf
TOTAL 33872 cbf
33872 cbf @ 22c = $7451.84

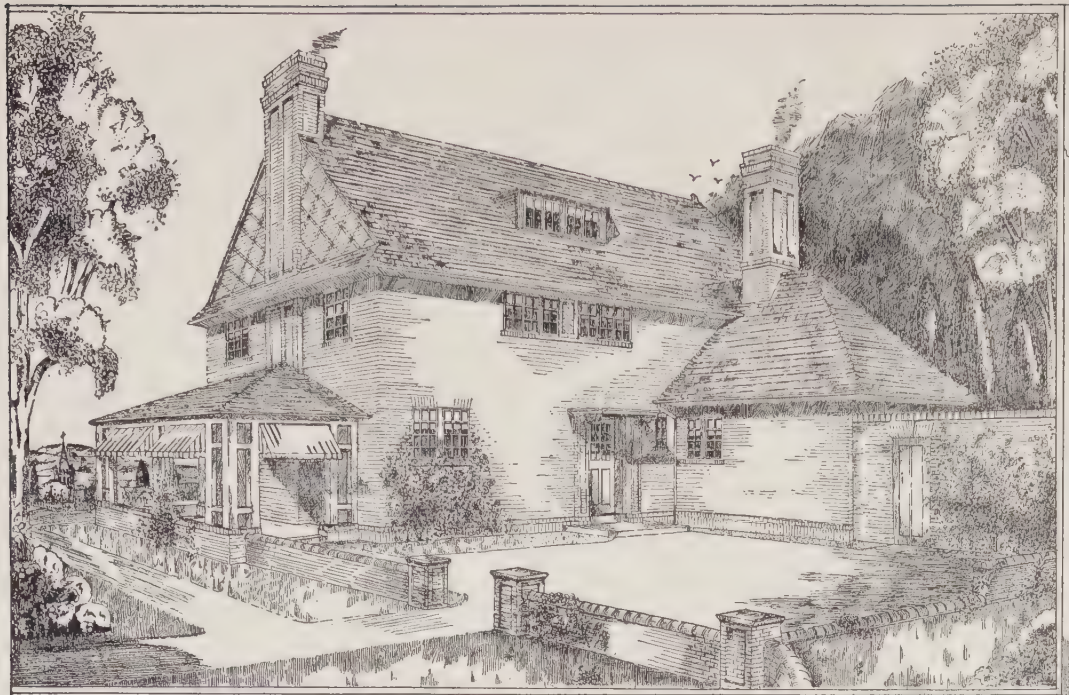
NOTE:
WALLS TO BE LAID UP IN HY-TEX BRICK - BOND TO BE DOUBLE STRETCHER FLEMISH WITH DARKER HEADERS - - -
SUBMITTE DY - HURRY UP -

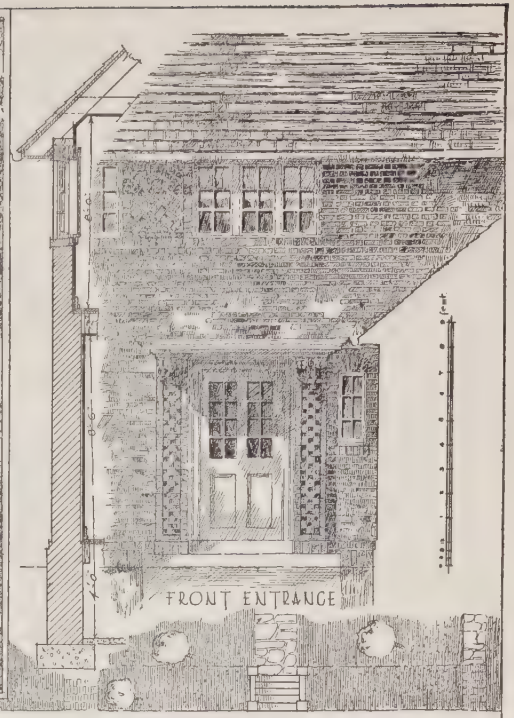
PLAN OF SECOND FLOOR.

0 10 20 30

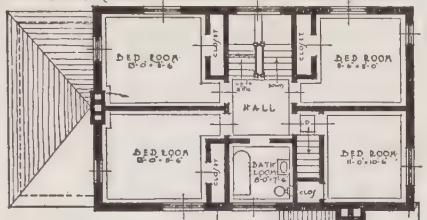
BRICK BUILDER COMPETITION FOR A $7500.00 BRICK HOUSE

DESIGN BY O. HOHN
151 West 64th Street, New York, N. Y.

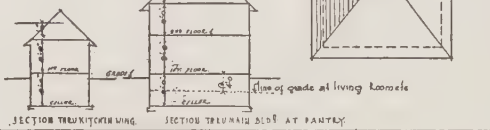




COLOR SCHEME— ROOF TO BE SILVER GREY IN SHADES {BRICK WORK TO BE A MIXTURE OF REDS BROWNS & PURPLE TINTS WITH THE HEADERS PICKED OUT IN DARK TINTS JOINTS ¾" THICK



·SECOND FLOOR PLAN·



CUBAGE

NOTE—BUILDING UNDER LIVING ROOM & HALL & DINING ROOM IS EXCAVATED 3'-0" BELOW GRADE AND GRADE COVERED WITH 3" OF CINDER CONCRETE — CELLAR TO EXTEND UNDER KITCHEN WING & PANTRY ONLY

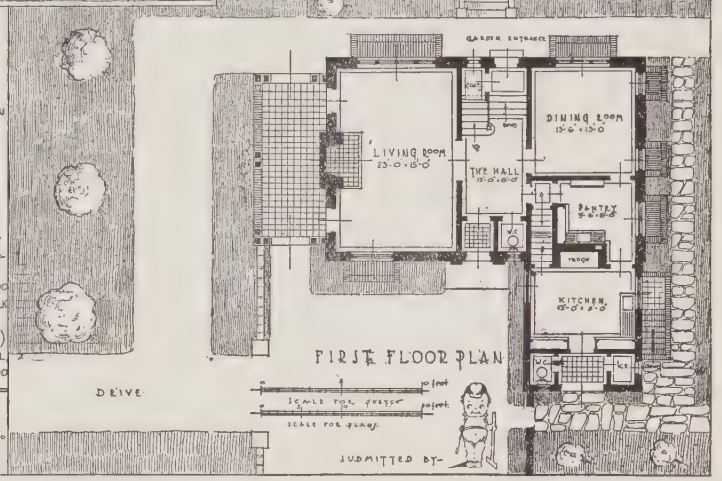
MAIN BUILDING 39'-6" × 25'-6" × 28'-0" =	28,210
EXTRA DEPTH FOR MAIN BUILDING UNDER PANTRY TO FORM CELLAR 12'-0" × 11'-0" × 4'-0" =	528
KITCHEN WING 16'-0" × 11'-6" × 20'-0" =	640
MAIN PORCH ½ OF 21'-0" × 9'-0" × 10'-0" =	472
CHIMNEY STACK ON MAIN BUILDING 4'-0" × 2'-0" × 40 =	
" " ON KITCHEN WING 3'-0" × 4'-0" × 3'-0" =	108
TOTAL C.F.	33,998

COSTS OF VARIOUS WORKS

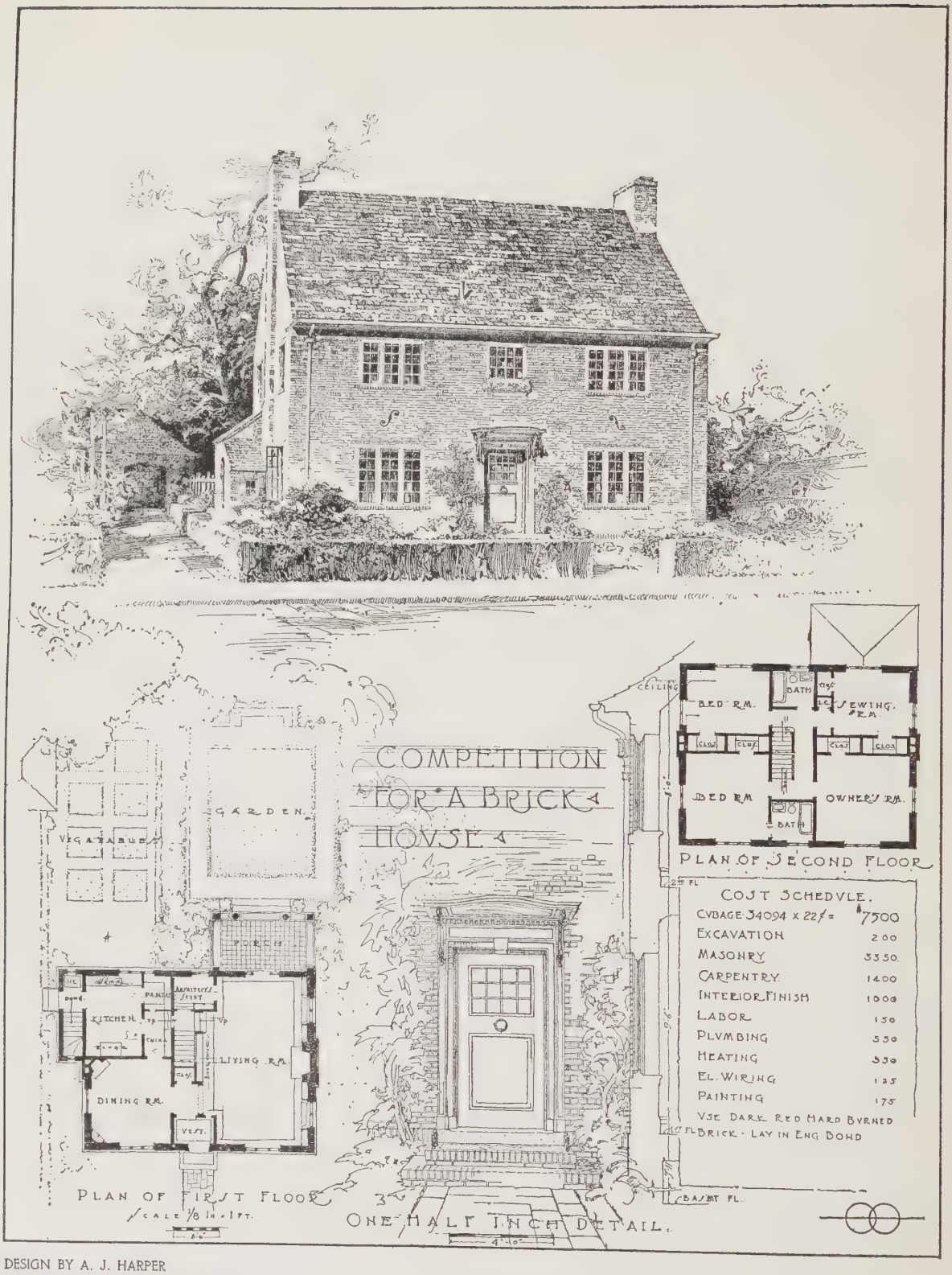
EXCAVATOR WORK 100.00 BRICK WORK 3000.00 LUMBER 900.00 CARPENTRY 600.00 MILL WORK 500.00 HEATING 600.00 PLUMBING 500.00 WIRING 100.00 HARDWARE (ROUGH & FINISHED) 250.00 PLASTER WORK 400.00 SHEET METAL 75.00 LIGHT FIXTURES 150.00 GAS PIPING 100.00 PAINTER WORK 200.00 = 7480.00

COMPETITION FOR A 7500.00 BRICK HOUSE.

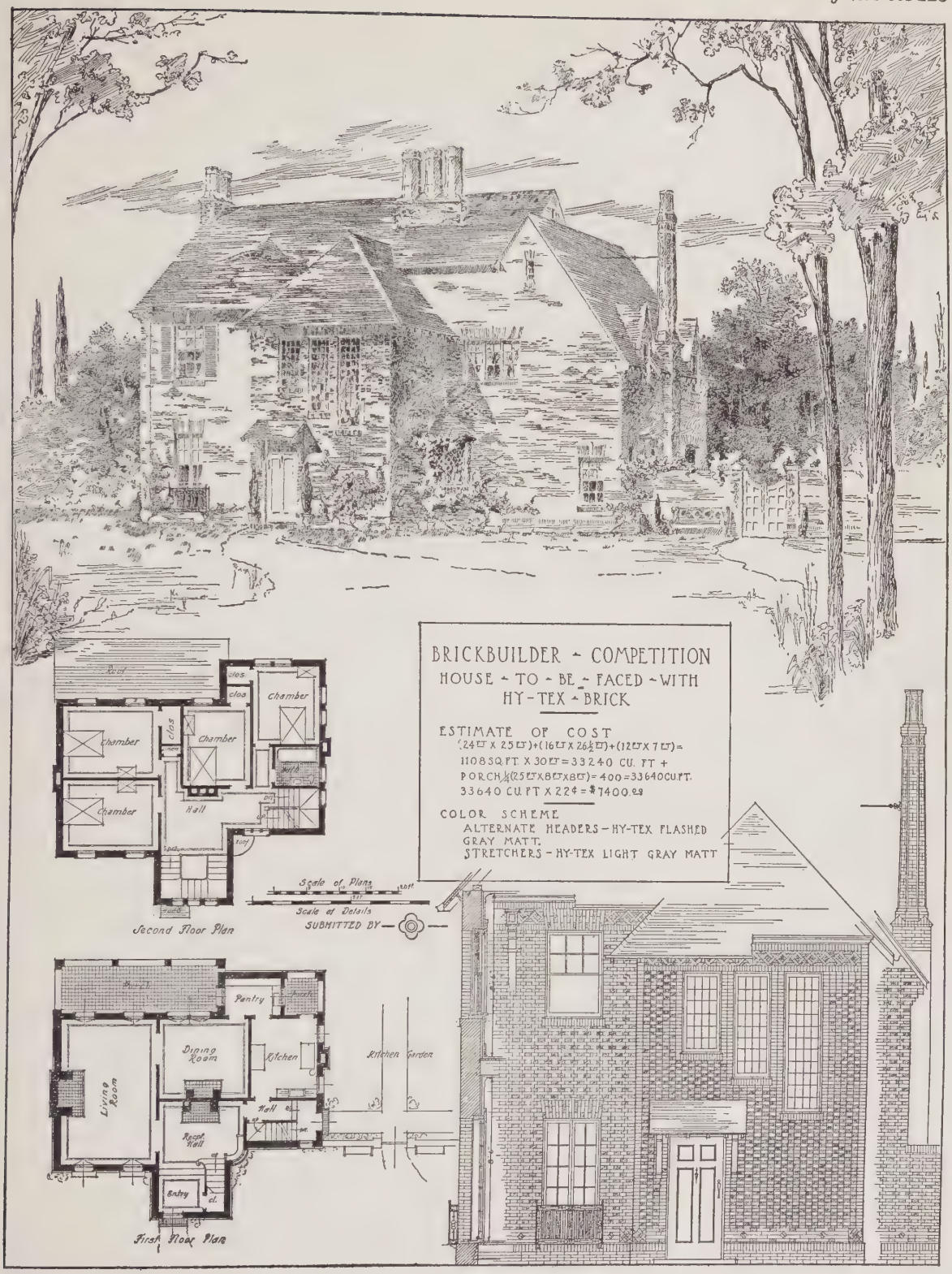
FEBRUARY THE 10TH 1914



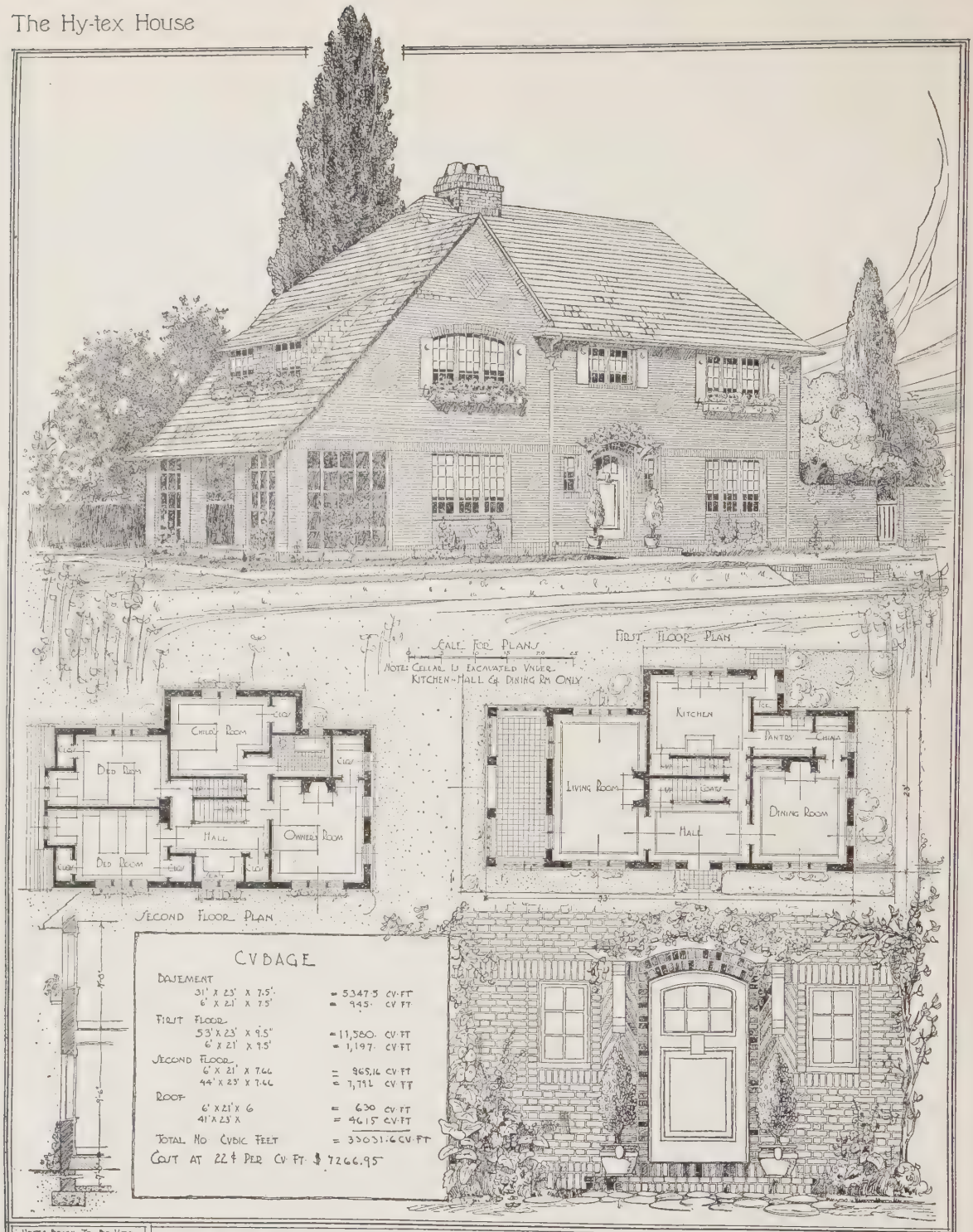
DESIGN BY LEWIS A. MACKENZIE
5750 Pine Street, Philadelphia, Pa.



DESIGN BY A. J. HARPER
470 Fourth Avenue, New York, N. Y.



DESIGN BY CHARLES H. UMBRECHT
131 Williams Street, East Orange, N. J.

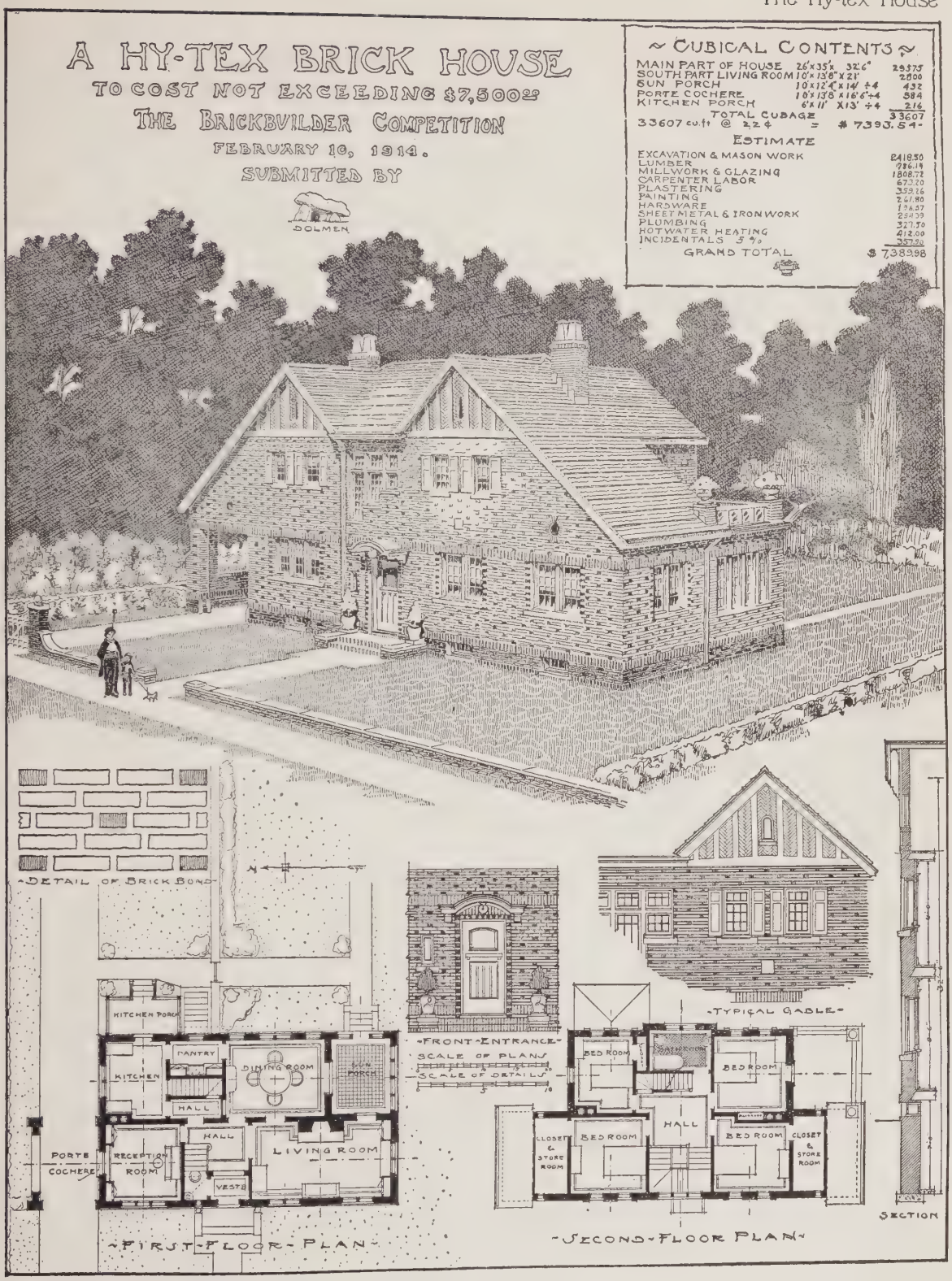


NOTE: BRICK TO BE USED IS TO BE HY-TEX "BONHAM" IN ITS FULL RANGE OF COLOR PROPERLY BLENDED ON WALL LAID FLEMISH BOND WITH ¾" WHITE MORTAR JOINTS

BRICKBUILDER COMPETITION
A HOUSE OF HY-TEX BRICK

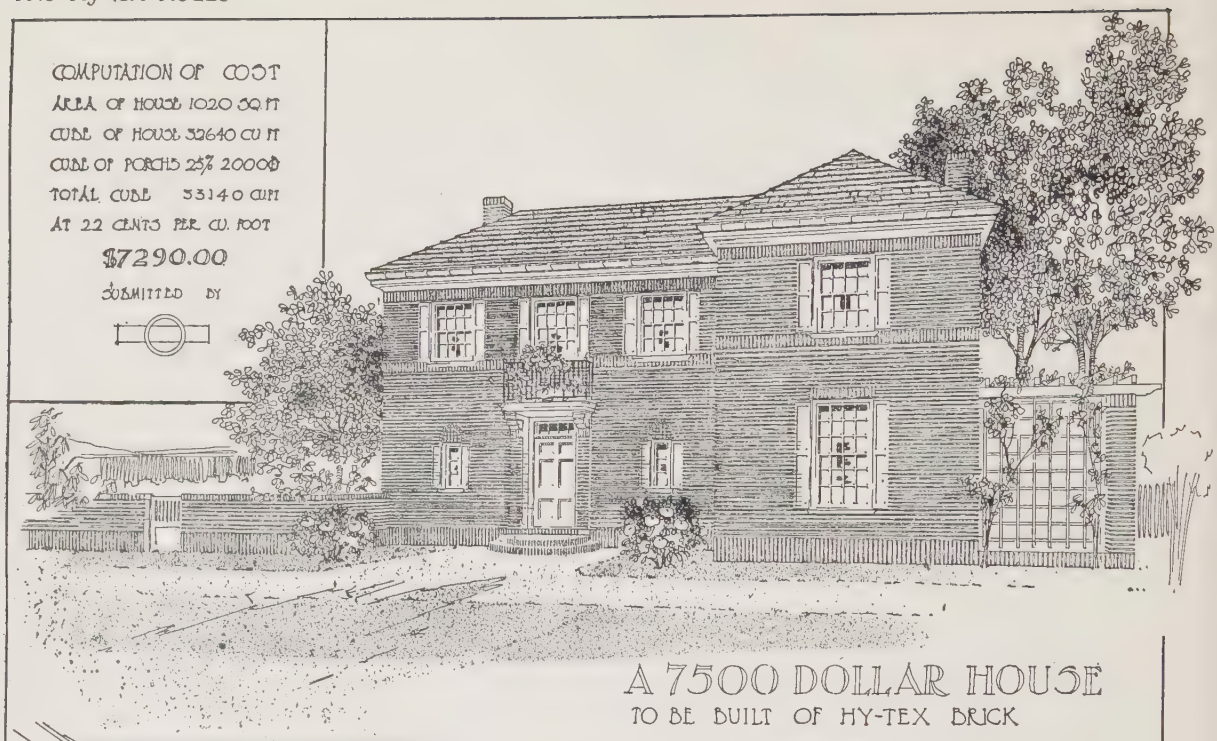
SUBMITTED BY "HOCUS"

DESIGN BY WILLIAM J. MOONEY
110 State Street, Boston, Mass.

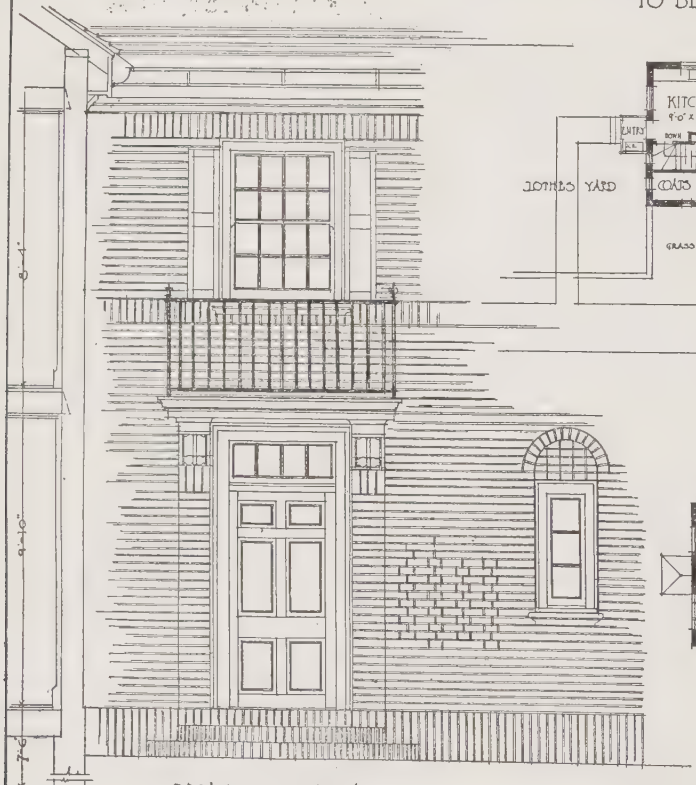


DESIGN BY GEORGE FULLER GREENE
424 Rialto Building, Kansas City, Mo.

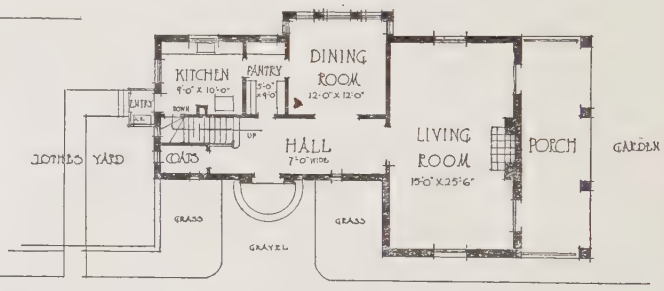
COMPUTATION OF COST
AREA OF HOUSE 1020 SQ FT
CUBE OF HOUSE 32640 CU FT
CUBE OF PORCHES 25% 2000 CU FT
TOTAL CUBE 34140 CU FT
AT 22 CENTS PER CU. FOOT
$7290.00
SUBMITTED BY



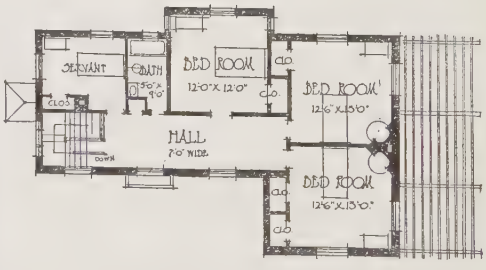
A 7500 DOLLAR HOUSE
TO BE BUILT OF HY-TEX BRICK



DETAIL OF ENTRANCE



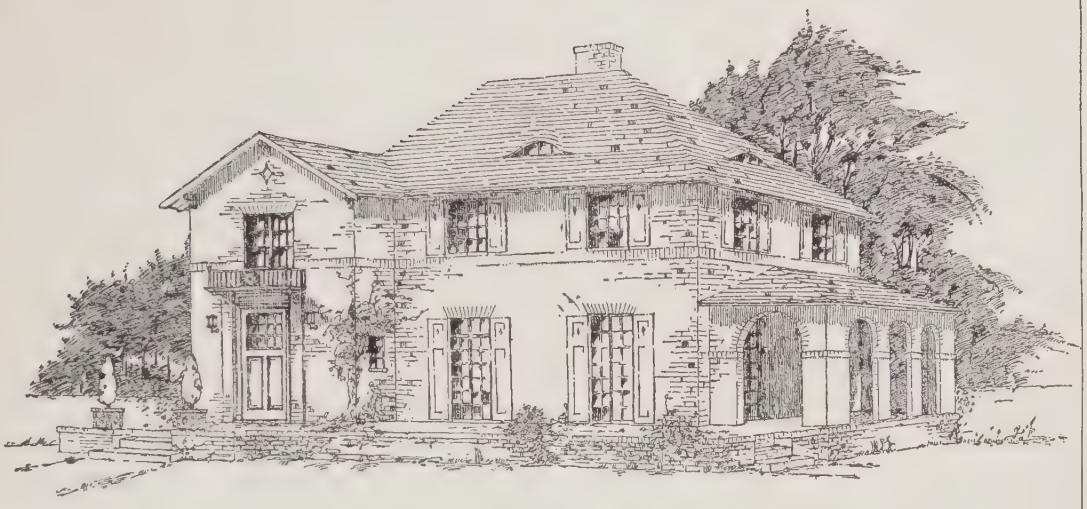
FIRST FLOOR PLAN

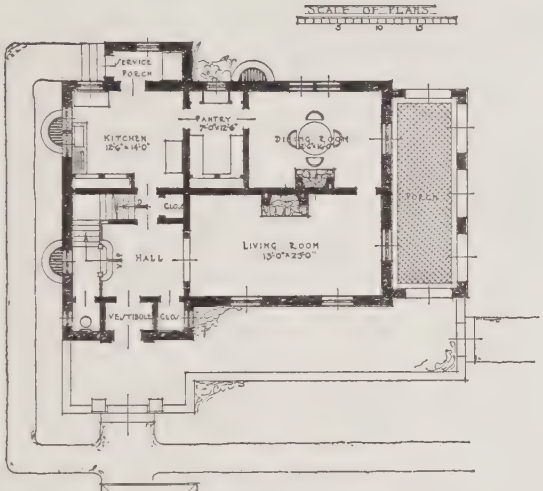


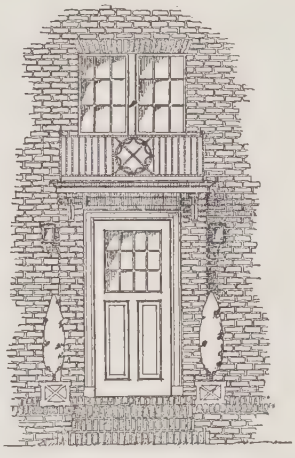
SECOND FLOOR PLAN

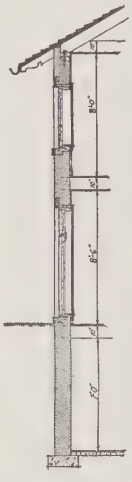
SCALE:

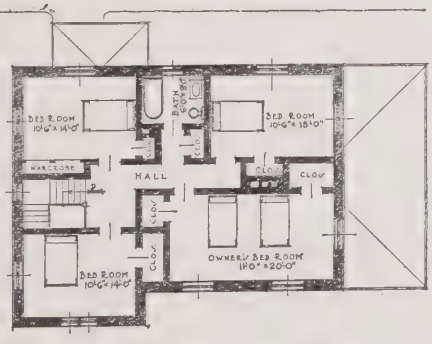
DESIGN BY LOUIS SCHALK
1135 Merchants Exchange Building, San Francisco, Cal.









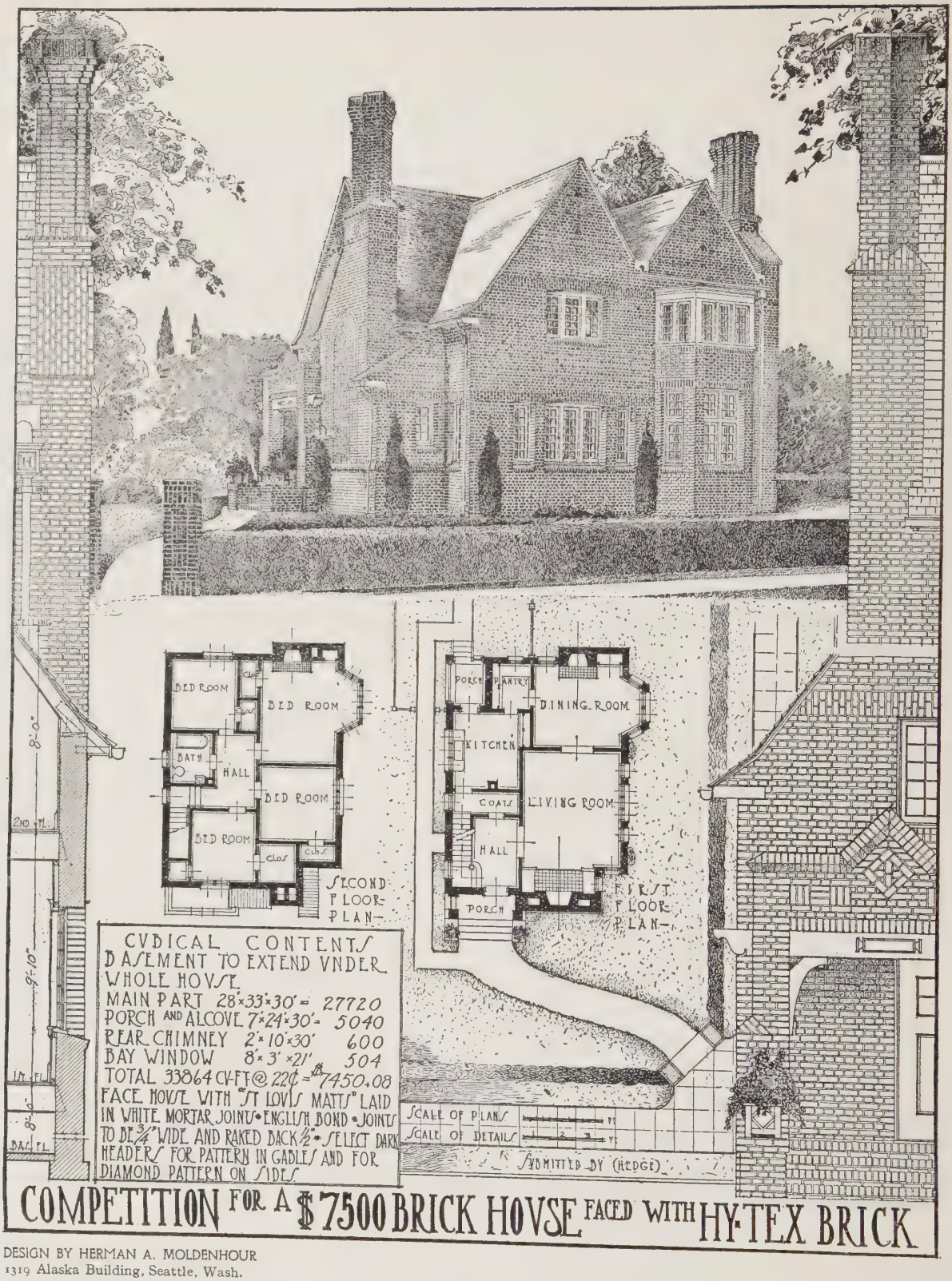


CUBICAL CONTENTS OF HOUSE

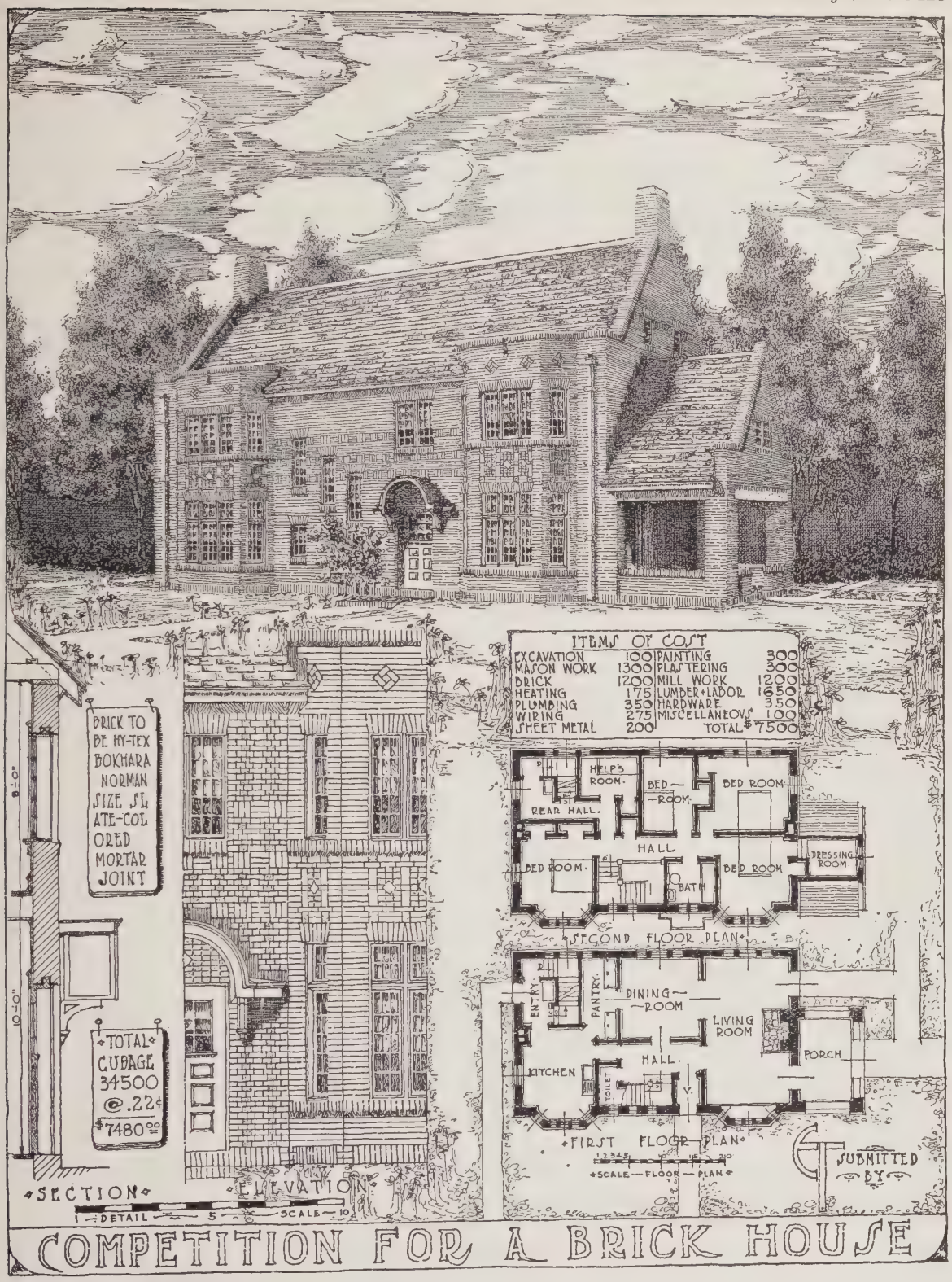
MAIN HOUSE	40'-0" x 28'-0" x 30'-0"	= 33600
WING IN FRONT	6'-0" x 4'-0" x 21'-0"	= 1344
PORCH	(9'-0" x 25'-6" x 12'-0") ¼	= 689
SERVICE WING	(10'-6" x 4'-8" x 12'-0") ¼	= 147
AREAS CHIMNEY & STEPS		40
		35820
DEDUCTING FOR UNEXCAVATED PORTION ON RIGHT SIDE OF HOUSE		= 1730
TOTAL CUBIC FT.		= 34090
COST	34090 CU FT x 22¢	= $7499.80

COMPETITION FOR A BRICK HOVSE TO COST SEVEN THOVSAND FIVE HVNDRED DOLLARS

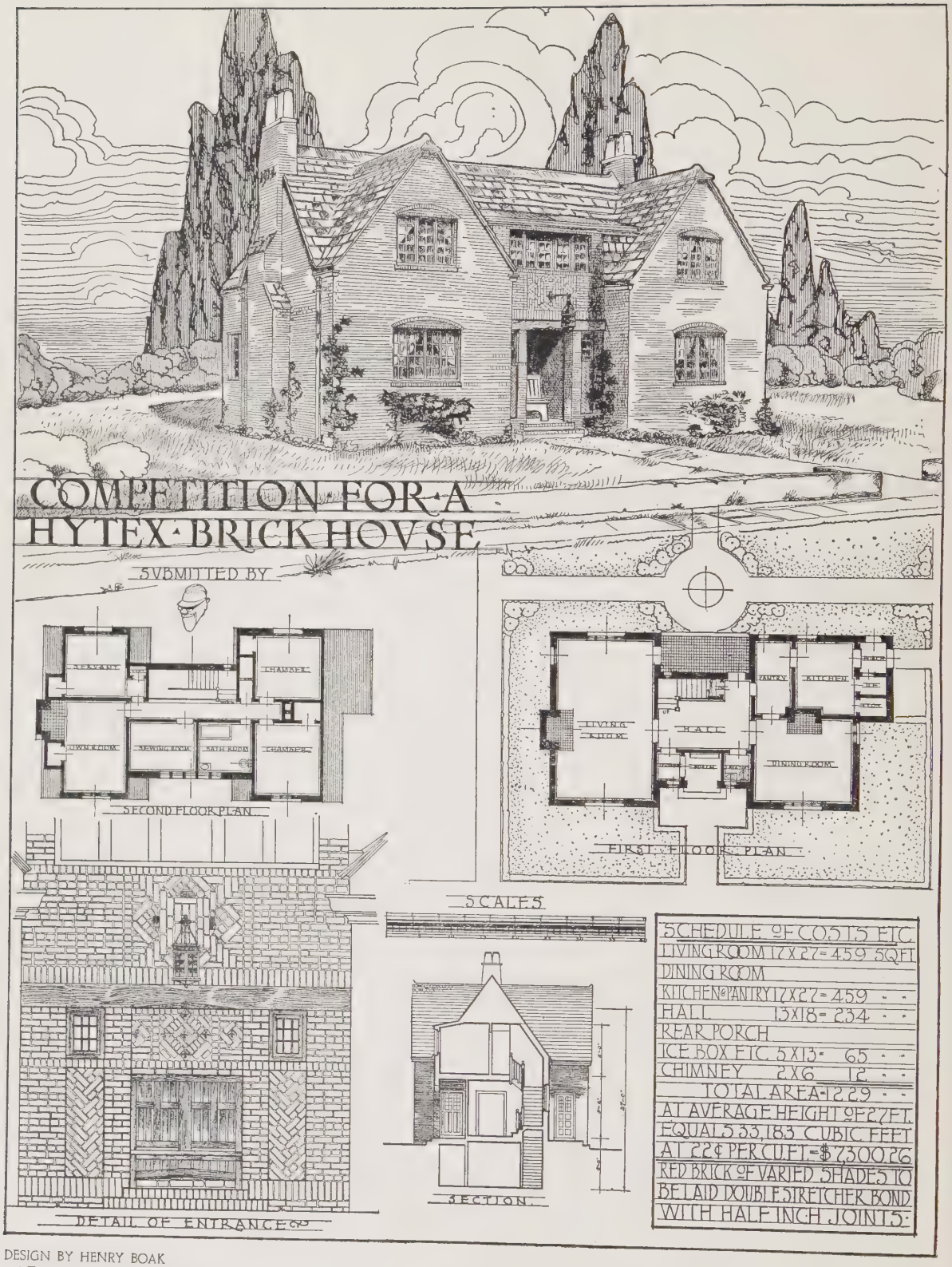
DESIGN BY EDMUND F. WINDSOR
1155 Dean Street, Brooklyn, N. Y.



DESIGN BY HERMAN A. MOLDENHOUR
1319 Alaska Building, Seattle, Wash.

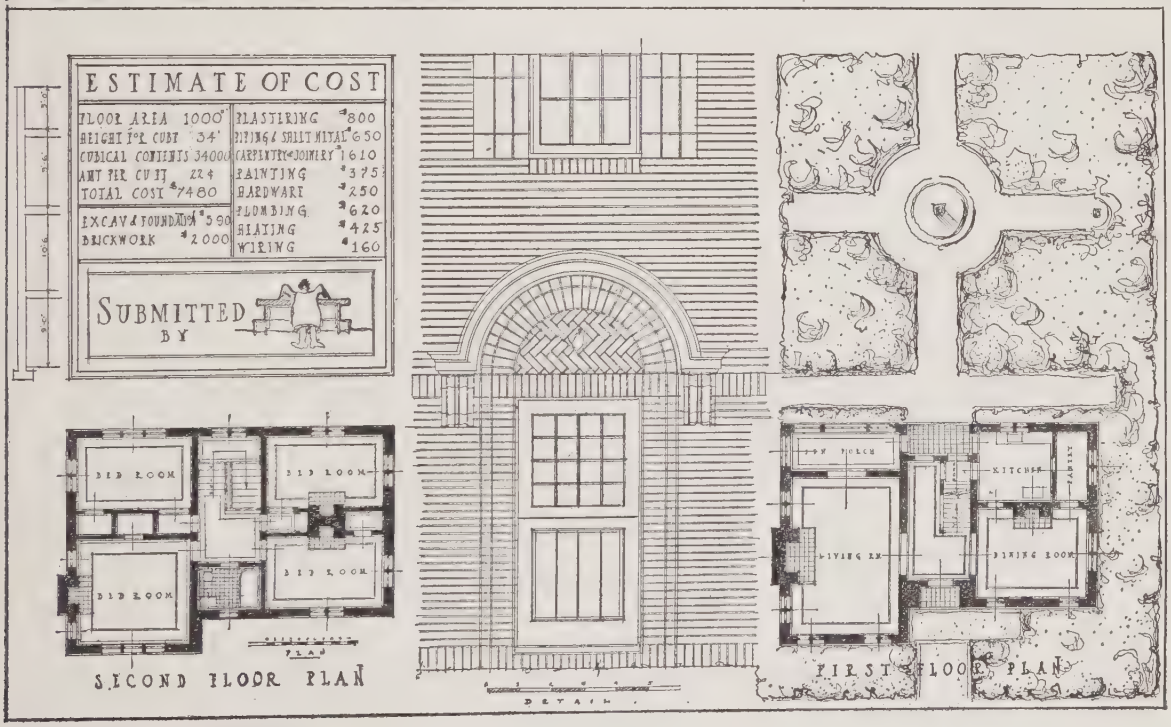


DESIGN BY EDWARD J. THOLE
1006 Vine Street, Evansville, Ind.

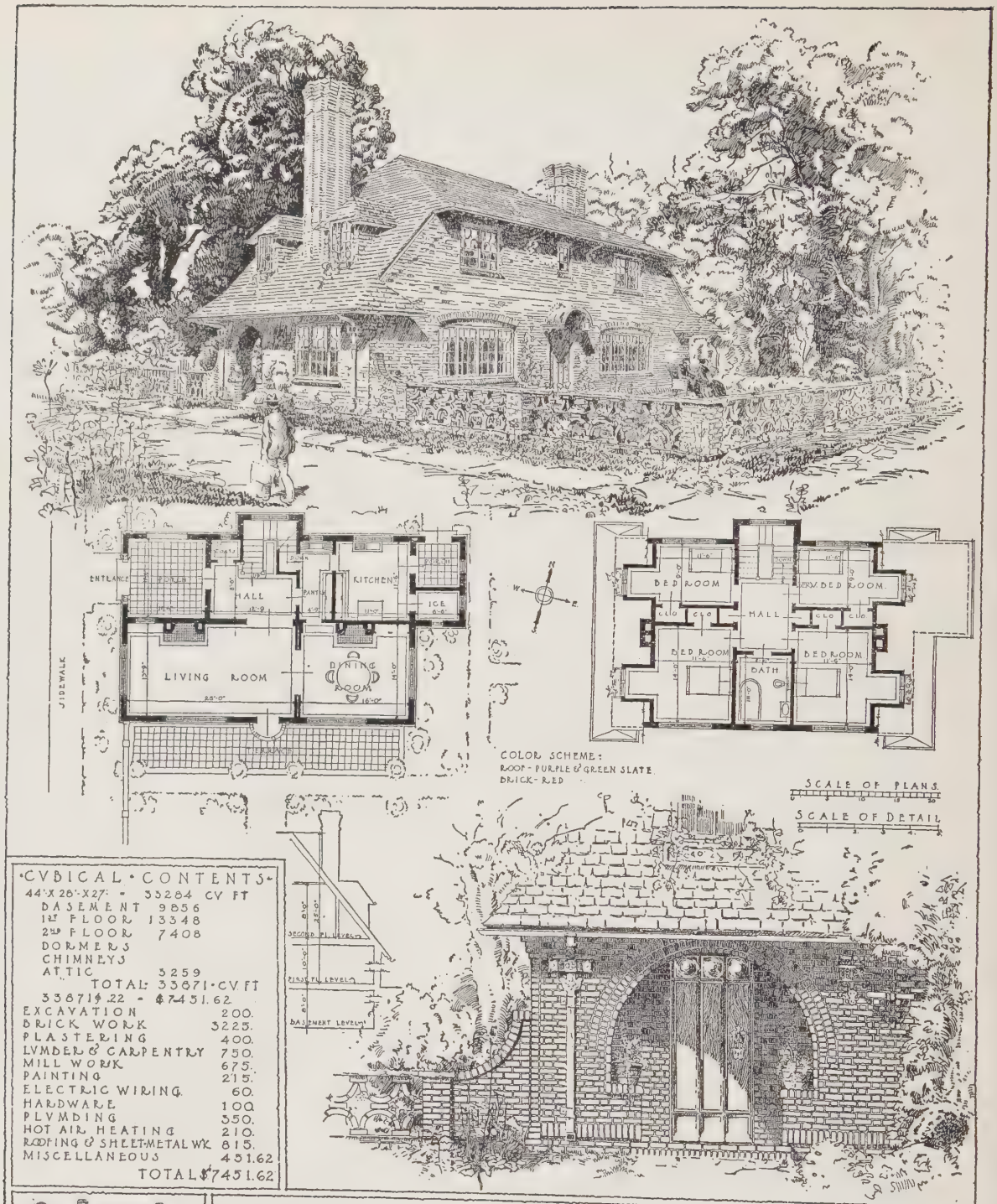


DESIGN BY HENRY BOAK
456 East 183d Street, New York, N. Y.

COMPETITION FOR A $7,500.00 BRICK HOUSE · Hy-tex ·



DESIGN BY CHARLES G. BEERSMAN
244 Fifth Avenue, New York, N. Y.



CUBICAL CONTENTS

44'X 26'-X27'- = 33284 CV FT

BASEMENT	9856
1ST FLOOR	13348
2ND FLOOR	7408
DORMERS	
CHIMNEYS	
ATTIC	3259
TOTAL	33871 CV FT

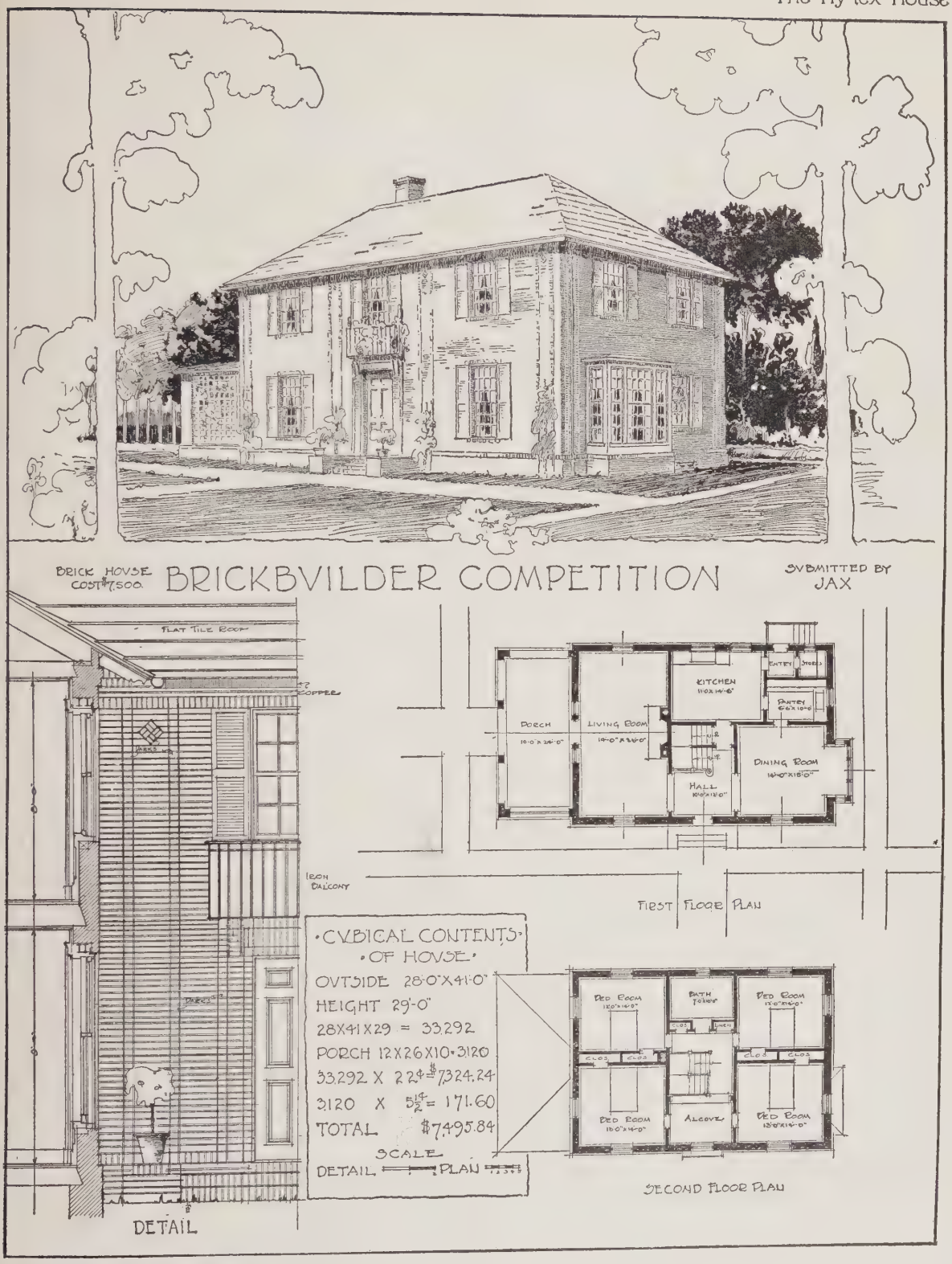
33871 @ .22 = $7451.62

EXCAVATION	200.
BRICK WORK	3225.
PLASTERING	400.
LUMBER & CARPENTRY	750.
MILL WORK	675.
PAINTING	215.
ELECTRIC WIRING	60.
HARDWARE	100
PLUMBING	350.
HOT AIR HEATING	210.
ROOFING & SHEET-METAL WK	815.
MISCELLANEOUS	451.62
TOTAL	$7451.62

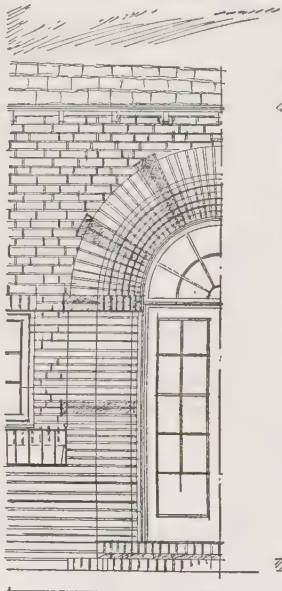
SUBMITTED BY

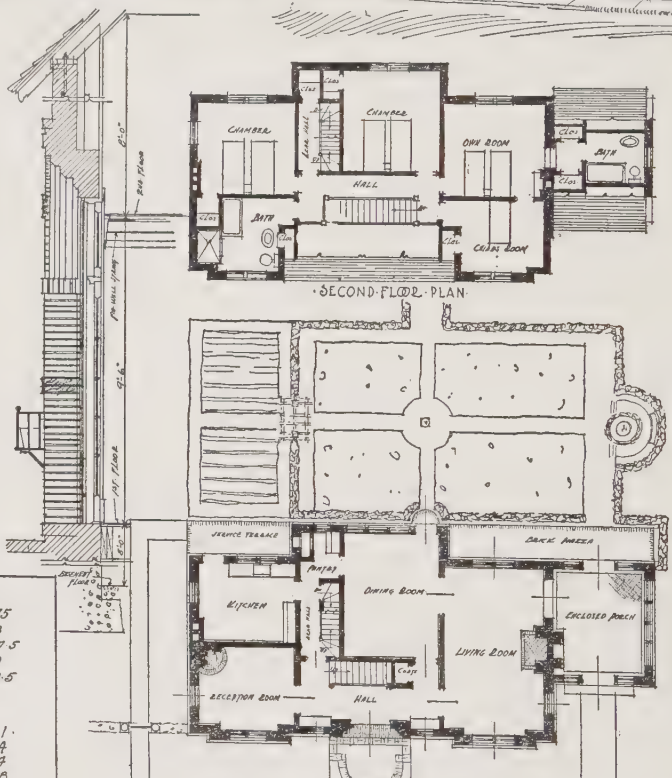
BRICK HOUSE TO COST $7,500 BRICKBUILDER COMPETITION

DESIGN BY ANTONIN A. RAYMOND
548 Riverside Drive, New York, N. Y.



DESIGN BY JOHN MATTHEW GRAY
20 Beacon Street, Boston, Mass.





THE CUBAGE

MAIN BUILDING	22'X45'X30.5' =	30195
PROJECTION AT REAR	19'X4'X30.5' =	2318
BAYS	2 X 10'X3½'X30.5' =	457.5
PORCH	¼ X 12'X15'X18' =	810
TOTAL CUBAGE	=	33780.5
COST AT 22¢ PER CU. FT.	=	$7432

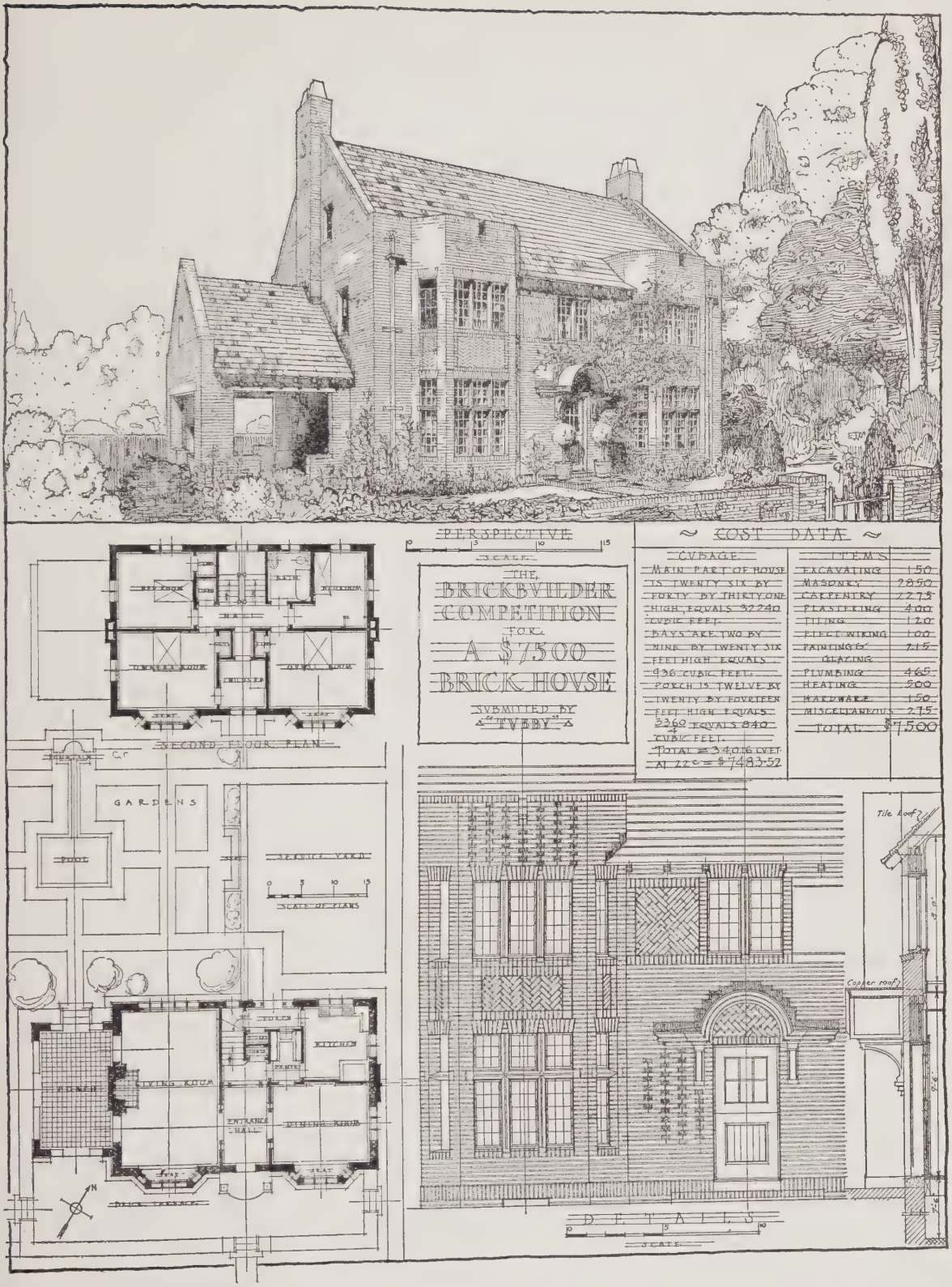
ITEMS OF COST.

EXCAVATING	301.
BRICK	2354
PLASTERING	564
LUMBER & CARPENTRY	1738
MILL WORK	1078
PAINTING	330
ELECTRIC WIRING	85
HARDWARE	101
PLUMBING	606
HOT AIR HEATING	226
MISCELLANEOUS	49

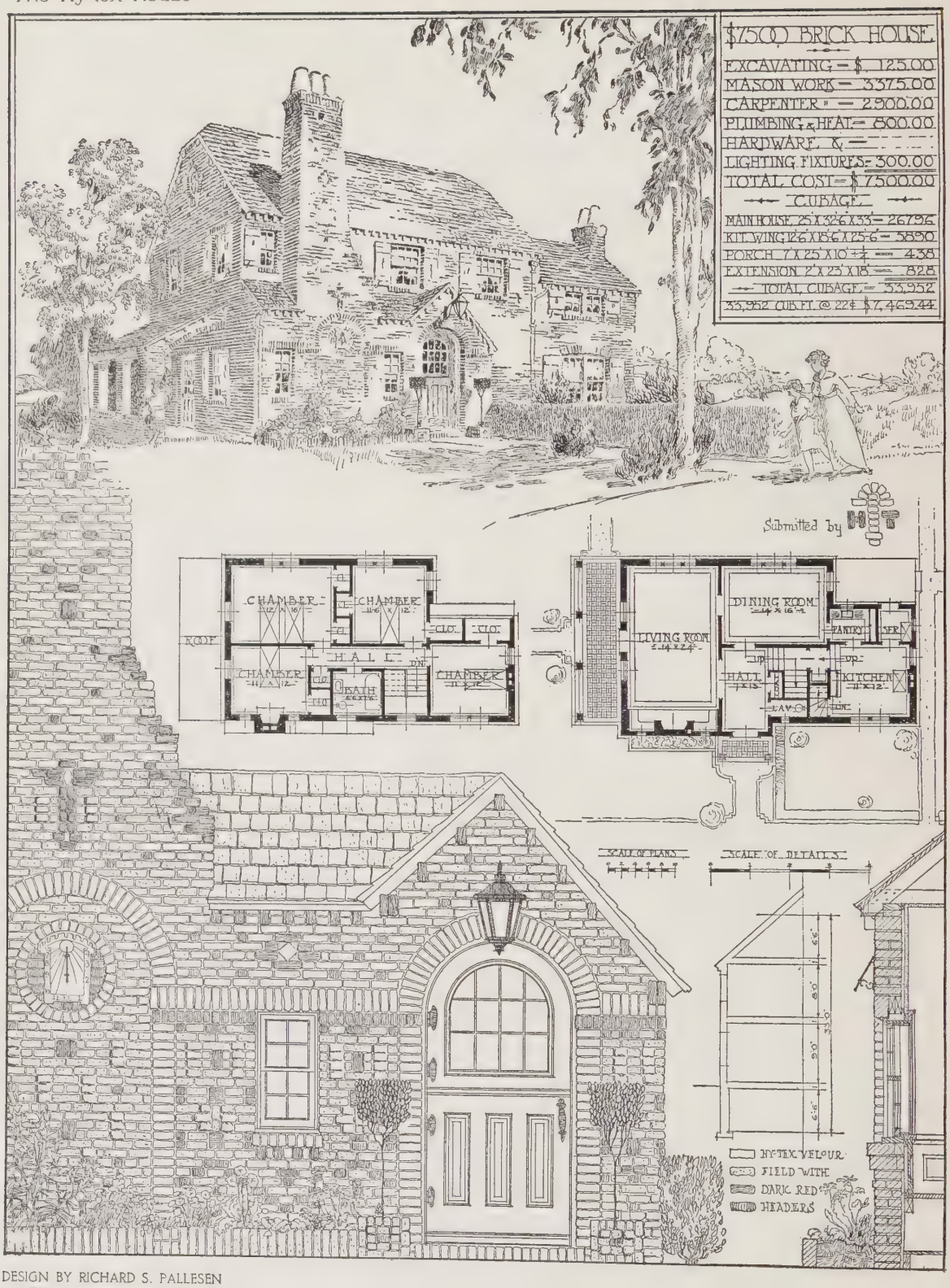
TOTAL COST $7432

BRICKBUILDER COMPETITION FOR A BRICK HOUSE TO COST $7500.00 SUBMITTED BY "COVNT".

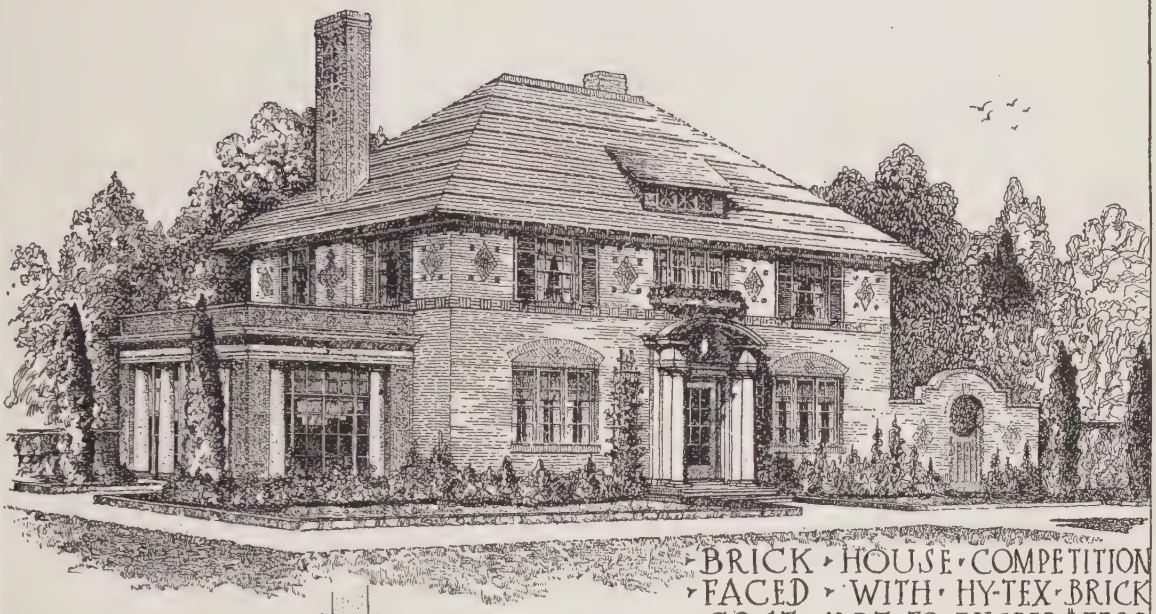
DESIGN BY E. D. STONEROD
R. F. D. No. 4, Bellevue Br., Pittsburg, Pa.



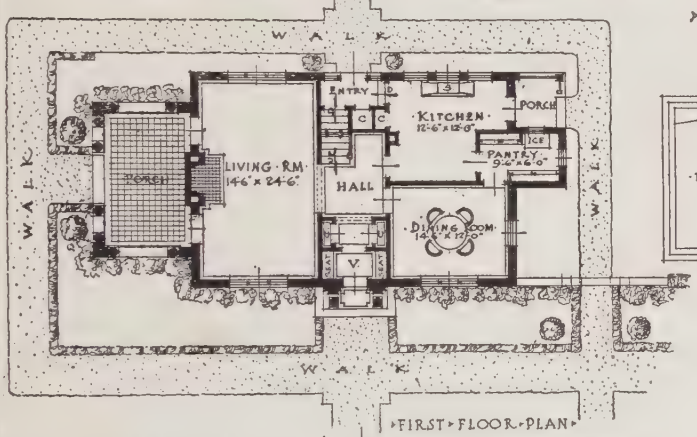
DESIGN BY DONALD C. BOLLARD
815 West 179th Street, New York, N. Y.



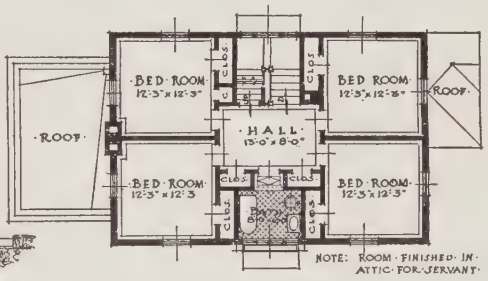
DESIGN BY RICHARD S. PALLESEN
345 Fifth Avenue, New York, N. Y.



BRICK HOUSE COMPETITION
FACED WITH HY-TEX BRICK
COST NOT TO EXCEED $7,500



FIRST FLOOR PLAN



NOTE: ROOM FINISHED IN ATTIC FOR SERVANT

SECOND FLOOR PLAN

SUBMITTED BY

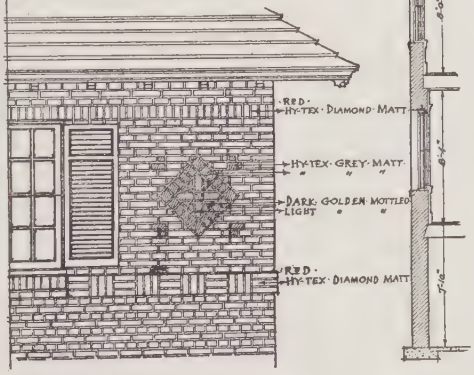
PLANS 1/8 1/4 1/2
SECTION 1/2 3/4 1
DETAILS 1 2 3

CUBAGE

MAIN PORTION 40×26-6×31	≈ 32860
SIDE PORCH+PANTRY 14×6×12(¼)	≈ 252
ENCLOSED PORCH 19×12×12(¼)	≈ 684
FRONT ENTRANCE 8×3×12(¼)	≈ 72
COST $7450.96	≈ $0.22 × 33868

ITEMS WITH COSTS

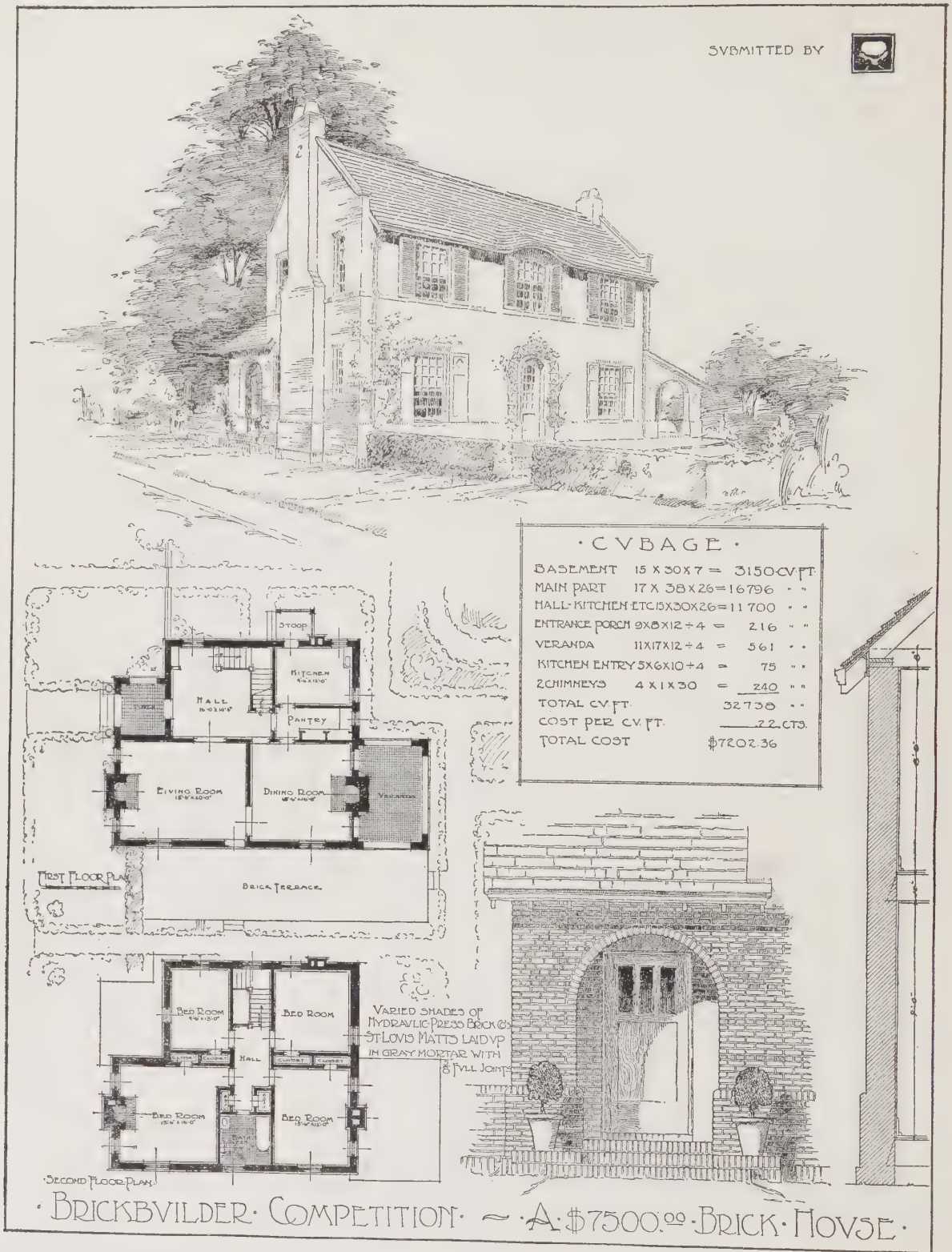
EXCAVATING	125
HY-TEX BRICK	1000
MASON WORK	1650
PLASTERING	600
CARPENTRY	2,500
PLUMBING	400
HEATING	375
PAINTING	300
ELECTRIC WIRING	125
HARDWARE	125
MISCELLANEOUS	300
	$7500



LEGEND

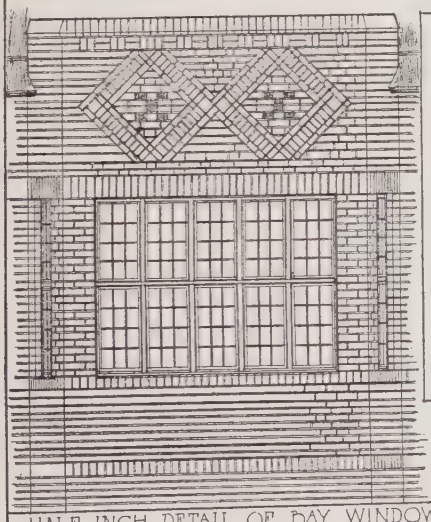
BODY OF HOUSE FACED WITH RED ST. LOUIS MATT ▾ WATERTABLE HY-TEX DIAMOND MATT STRETCHERS LAID VERTICAL & FLUSH ▸ BELT COURSE HY-TEX DIAMOND MATT DIAMOND PATTERNS IN FRIEZE-BORDER OF HY-TEX GREY MATT CENTER DESIGN OF GOLDEN MOTTLED MATTS BOTH DARK & LIGHT ▸ FROM WATERTABLE TO BELT COURSE BRICK LAID WITH DUTCH CROSS BOND ▸ ABOVE BELT COURSE IN ENGLISH BOND ▸ PORCH PIERS & CHIMNEYS ABOVE ROOF IN ST. LOUIS, BOKHARA MEDIUM RANGE & VENETIAN RED ▸ ALL BRICKWORK ⅝" FLUSH WHITE JOINT

DESIGN BY DANIEL SHEA
33 Lyman Street, Springfield, Mass.



DESIGN BY JAMES L. GATLING
504 Southern Trust Building, Little Rock, Ark.

SCALE OF PERSPECTIVE



SCHEDULE

CUBAGE & MATERIALS

LIVING ROOM WING	15'X21'X28' =	8.820
CENTRAL HALL ETC	21'X21'X28' =	12.348
DINING ROOM WING	15'X14'X28' =	5.880
KITCHEN WING	16'X13'X26' =	5.408
BAY WINDOWS	2/3X10½'X19' =	1.197
CHIMNEYS	2/3X2'X35' =	420
TOTAL CUBAGE	=	34.073

TOTAL COST OF HOUSE

34073 CUBIC FEET @ 22¢ = $7496.06

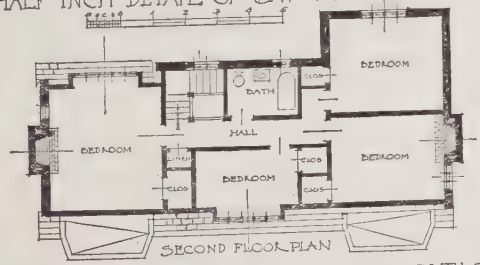
BRICKWORK TO BE HY-TEX, IN TWO COLOURS · DARK RED STRETCHERS WITH HEADERS VARYING TO A PURPLE TEXTURE TO BE HY-TEX Nº 17 · FLEMISH DOUBLE STRETCHER BOND HALF INCH JOINT WITH EVERY FOURTH ROW HEADERS · ROOF TO BE GRADUATED SLATE WITH MALLETED COPPER RIDGE · WINDOWS TO BE CASEMENTS WITH LEADED GLASS

SECTION

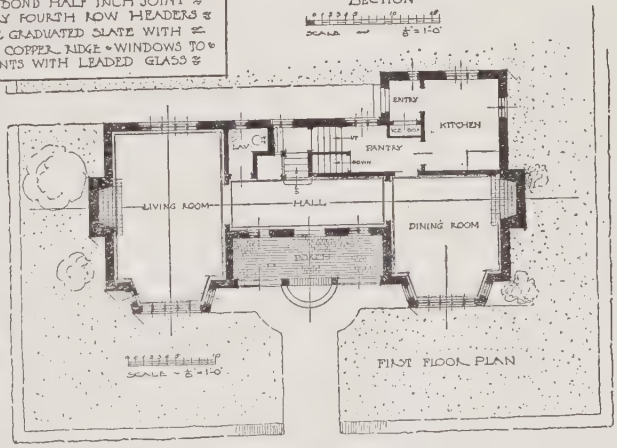
SCALE 1/8" = 1'-0"

SUB-MITTED BY

HALF INCH DETAIL OF BAY WINDOW



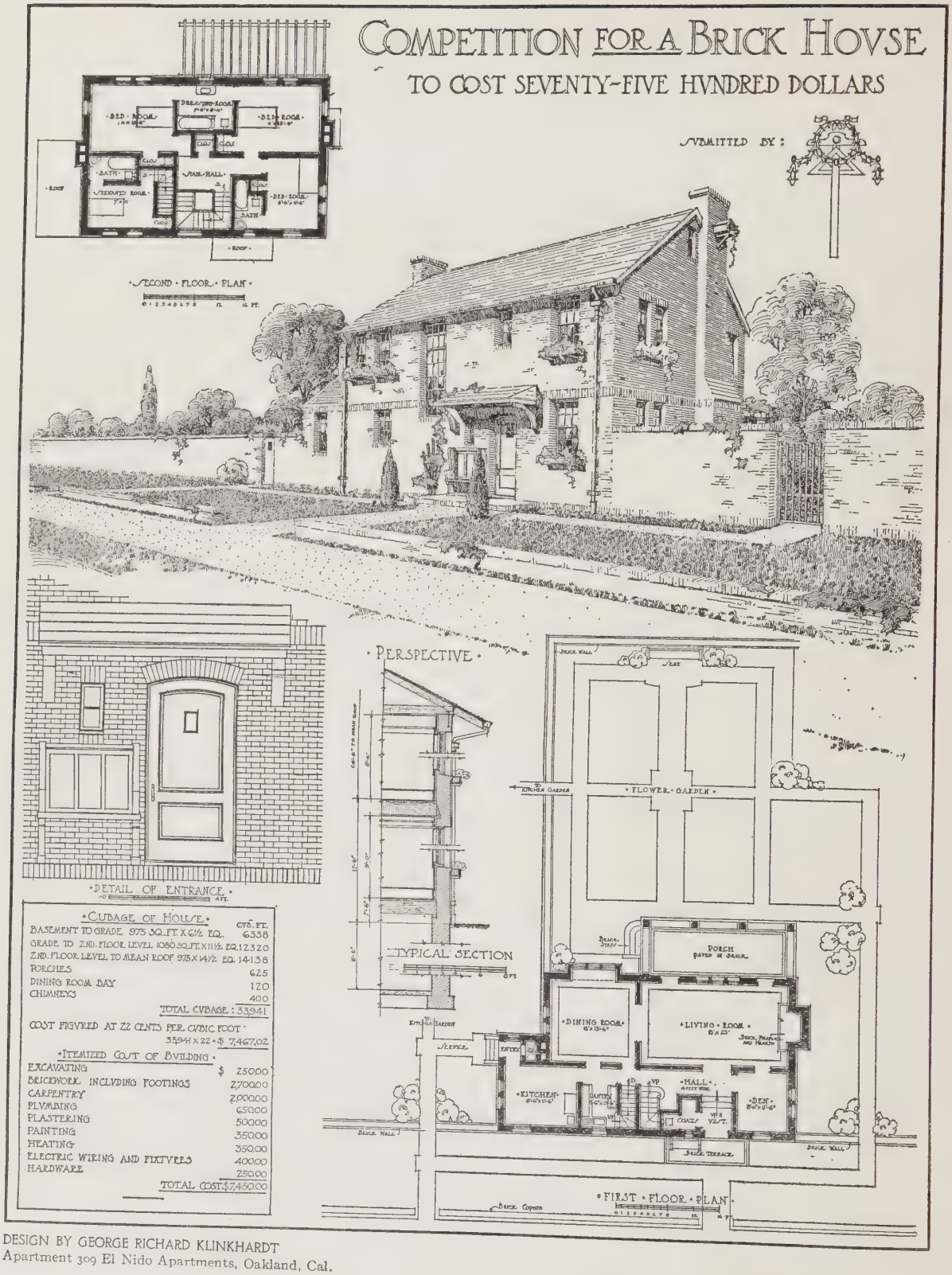
SECOND FLOOR PLAN



FIRST FLOOR PLAN

BRICKBUILDER COMPETITION FOR A $ 7500 BRICK HOUSE

DESIGN BY FRANCIS L. S. MAYERS
2 West 47th Street, New York, N. Y.

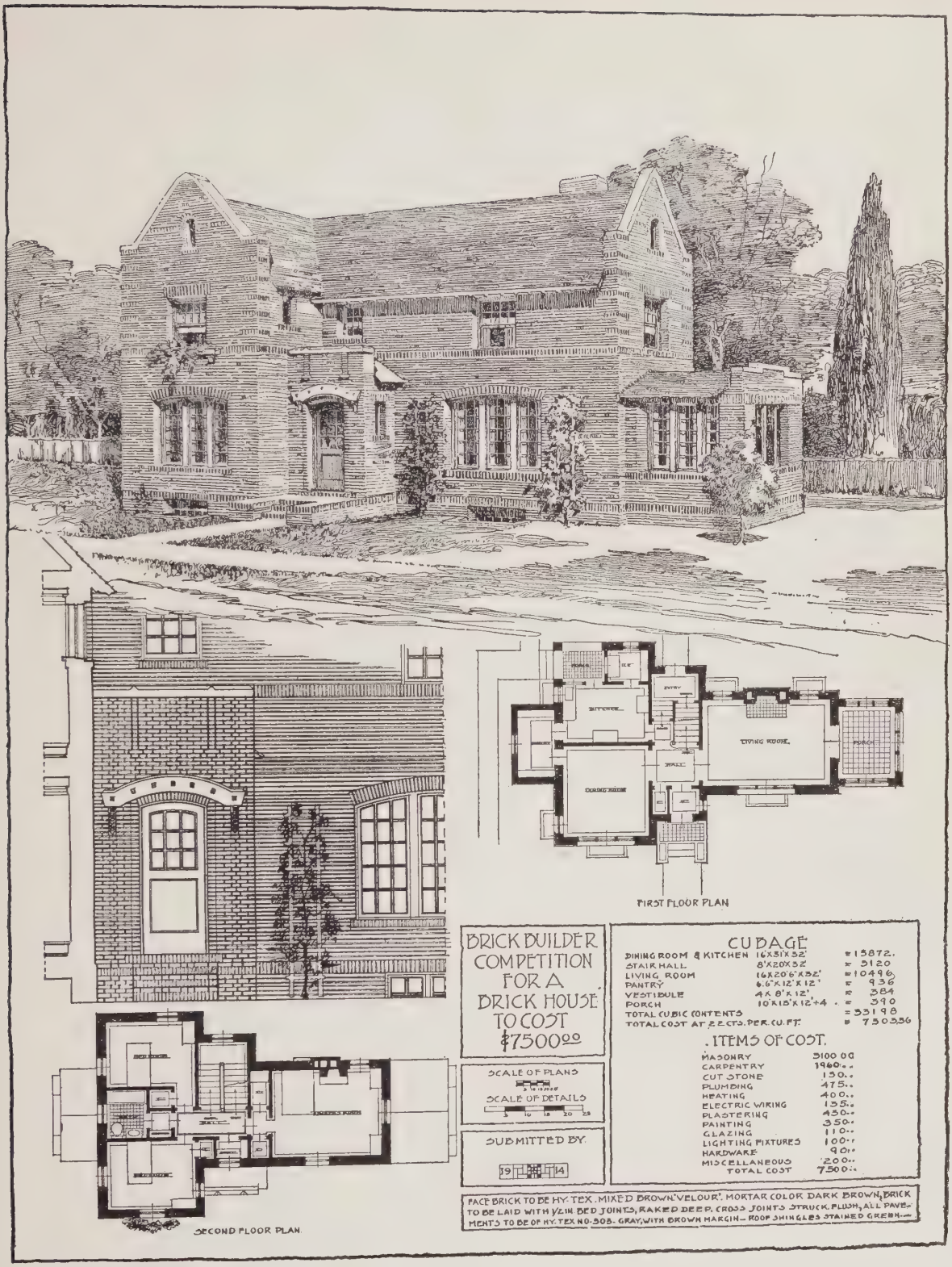


CUBAGE OF HOUSE	CUBIC FT.
BASEMENT TO GRADE 975 SQ. FT. X 6½ EQ.	6338
GRADE TO 2ND. FLOOR LEVEL 1080 SQ. FT. X 11½ EQ.	12320
2ND. FLOOR LEVEL TO MEAN ROOF 975 X 14½ EQ.	14138
PORCHES	625
DINING ROOM BAY	120
CHIMNEYS	400
TOTAL CUBAGE:	33941

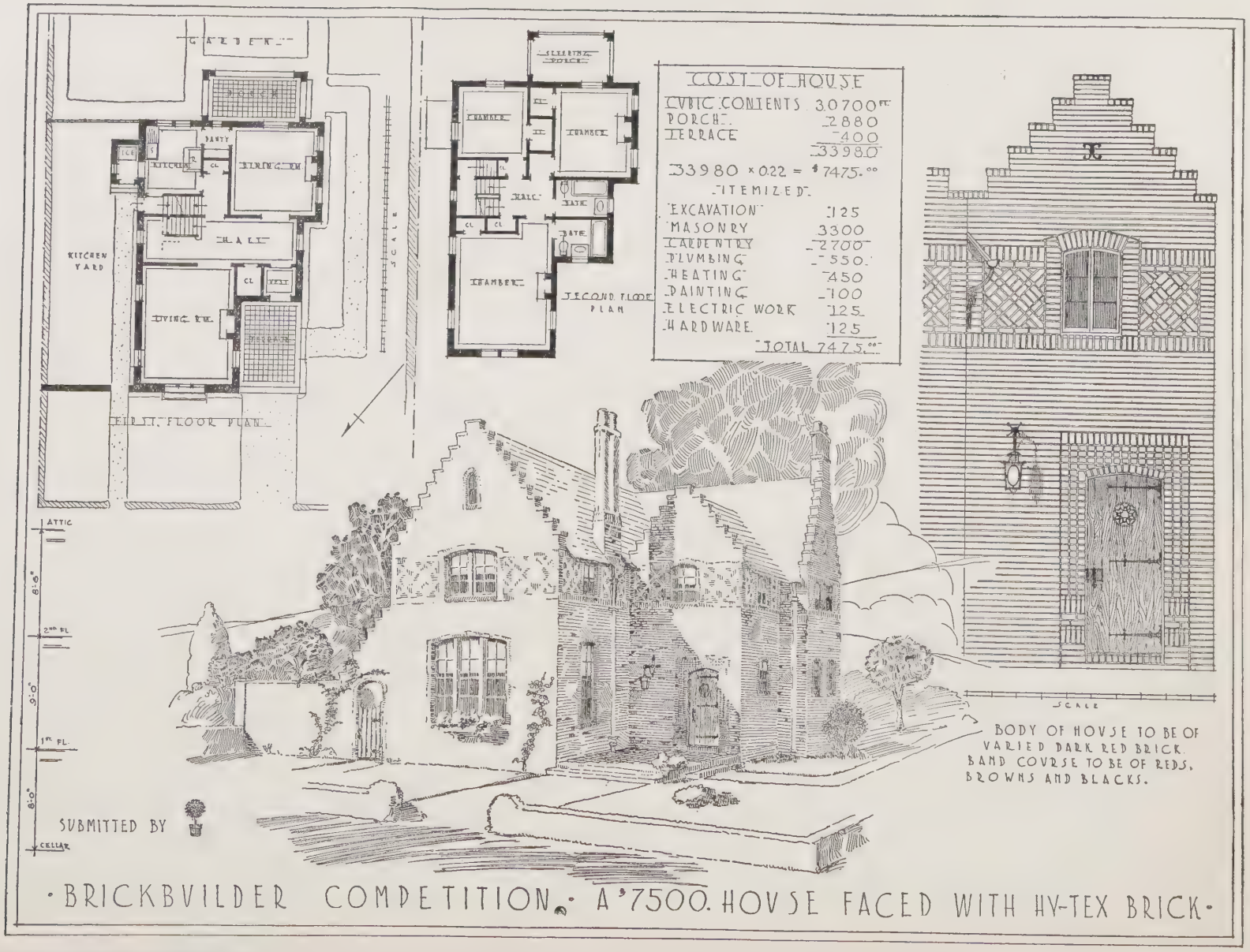
COST FIGURED AT 22 CENTS PER CUBIC FOOT
33941 × 22 = $ 7467.02

ITEMIZED COST OF BUILDING	
EXCAVATING	$ 250.00
BRICKWORK INCLUDING FOOTINGS	2700.00
CARPENTRY	2000.00
PLUMBING	650.00
PLASTERING	500.00
PAINTING	350.00
HEATING	350.00
ELECTRIC WIRING AND FIXTURES	400.00
HARDWARE	250.00
TOTAL COST:	$7450.00

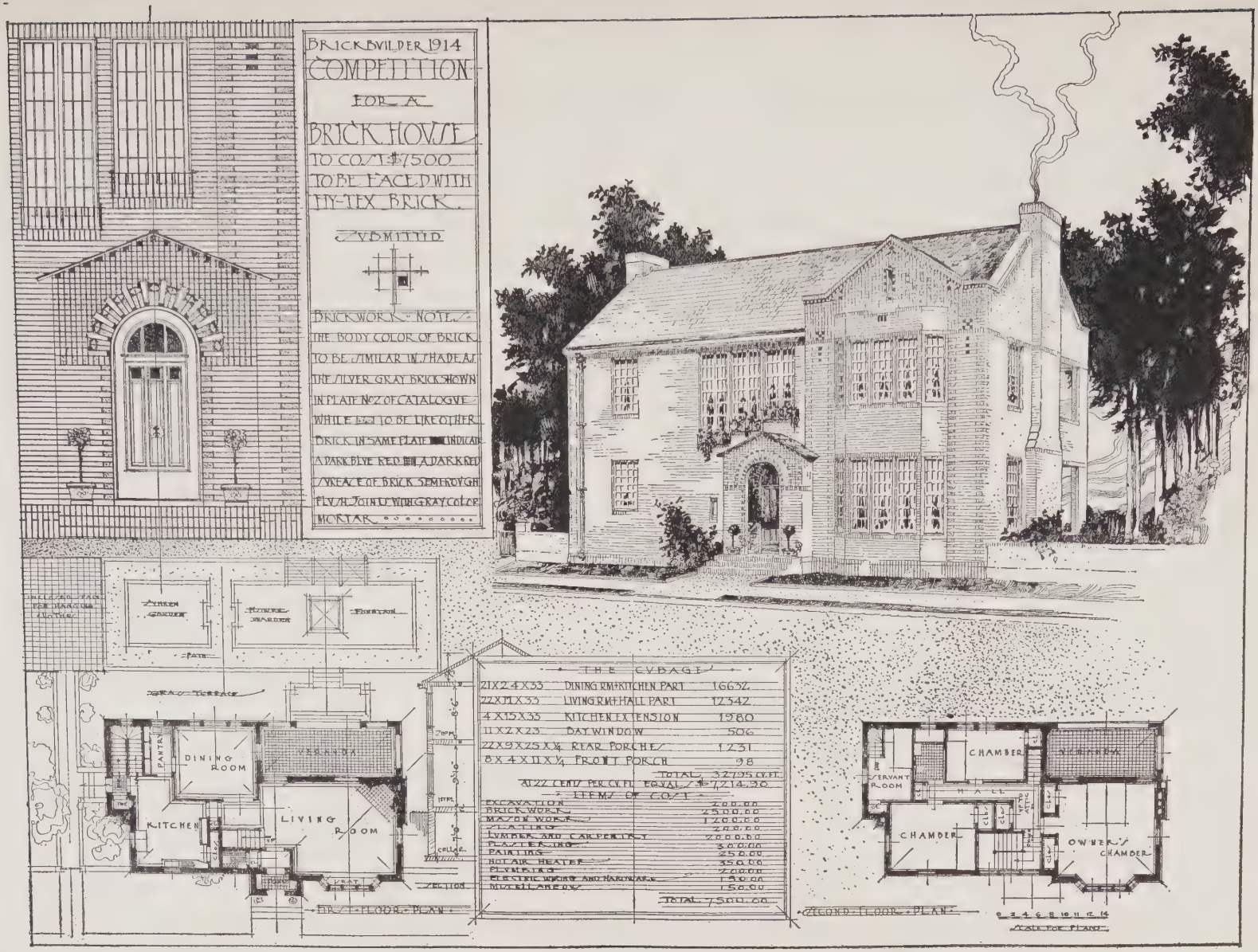
DESIGN BY GEORGE RICHARD KLINKHARDT
Apartment 309 El Nido Apartments, Oakland, Cal.



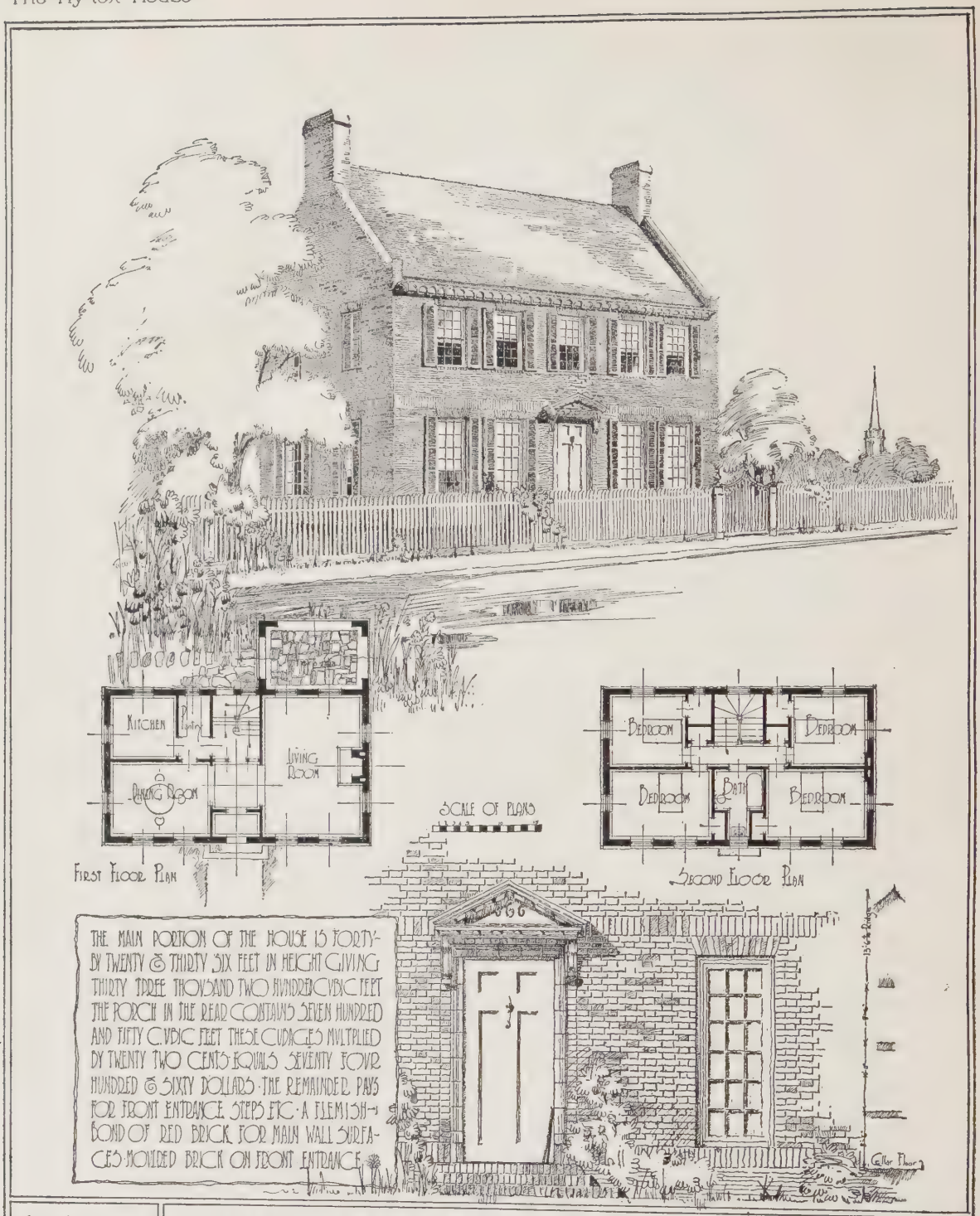
DESIGN BY HUGH BAKER DUNNING
35 South Dearborn Street, Chicago, Ill.



DESIGN BY ROBERT M. FARRINGTON
4 East 39th Street, New York, N. Y.

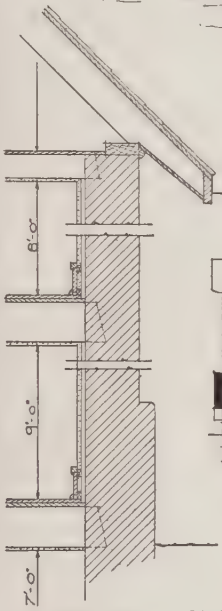


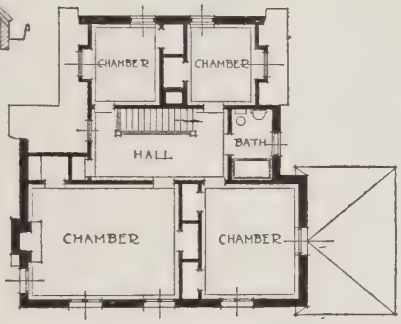
DESIGN BY GUSTAVE G. VIGOUROUX
50 West 84th Street, New York, N. Y.



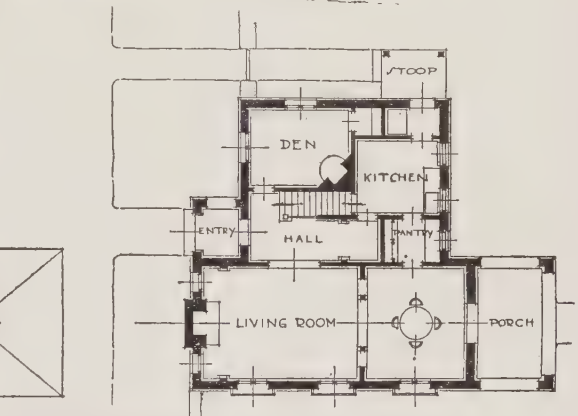
DESIGN BY ALFRED P. SHAW
50 Adams Street, Dorchester, Mass.

SUBMITTED BY

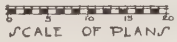




SECOND FLOOR PLAN



FIRST FLOOR PLAN



COMPETITION FOR A BRICK HOUSE

TO COST $7500

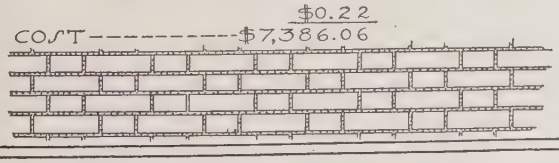
CUBAGE

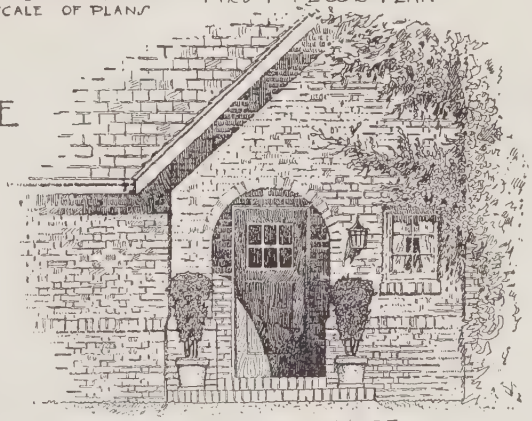
LIVING & DINING ROOMS--16'-6" X 36'-0"-594 cu
WING----------26'-6" X 20'-0"-530 "
ENTRY----------6'-0" X 7'-6" ÷ 4 = 13 "
PORCH----------10'-0" X 6'-6" ÷ 4 = 41 "
TOTAL No OF SQ. FT.----------1178 sq

28'-6" X 1178"-33573 CU. FT.

$0.22

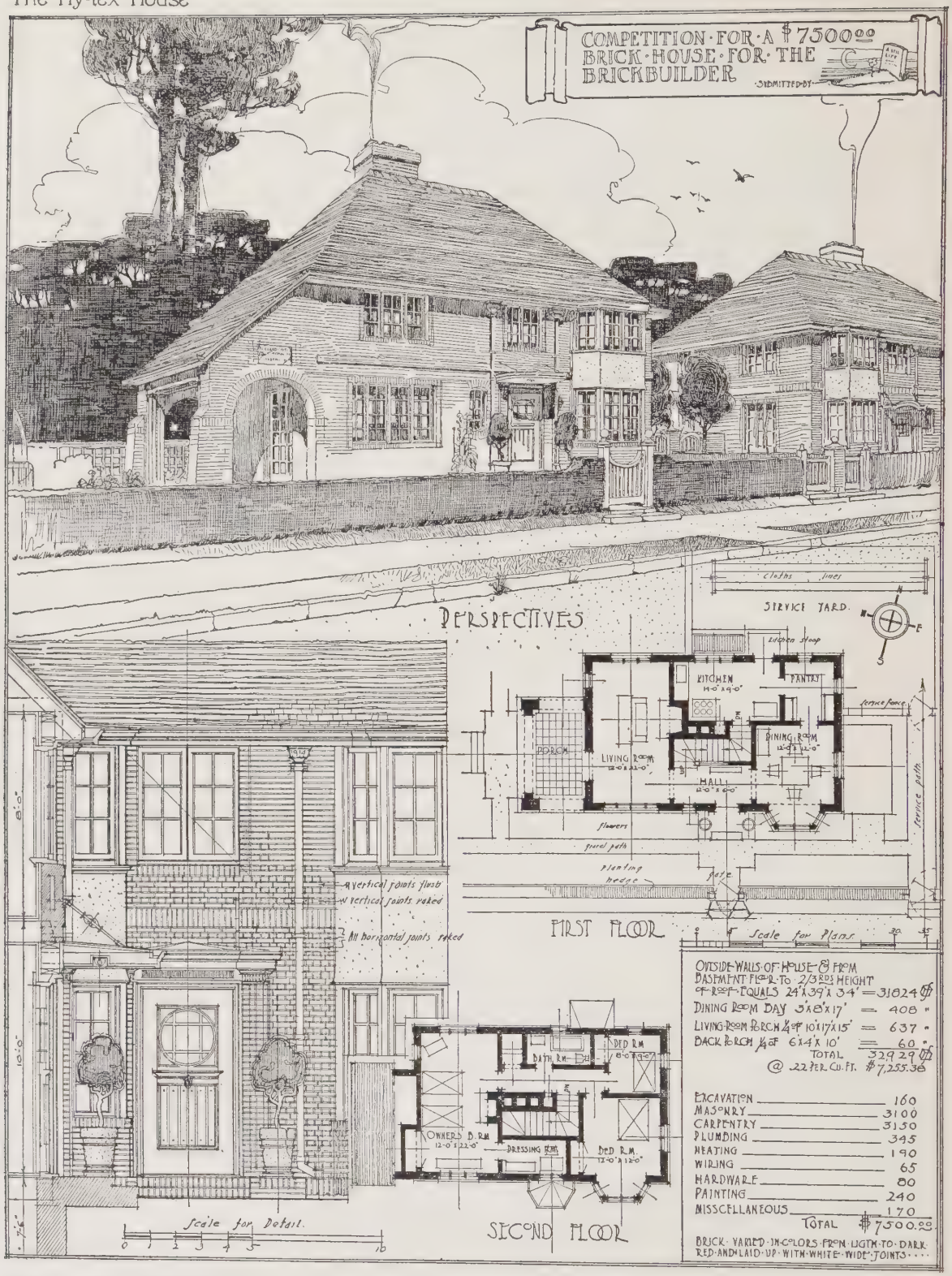
COST----------$7,386.06



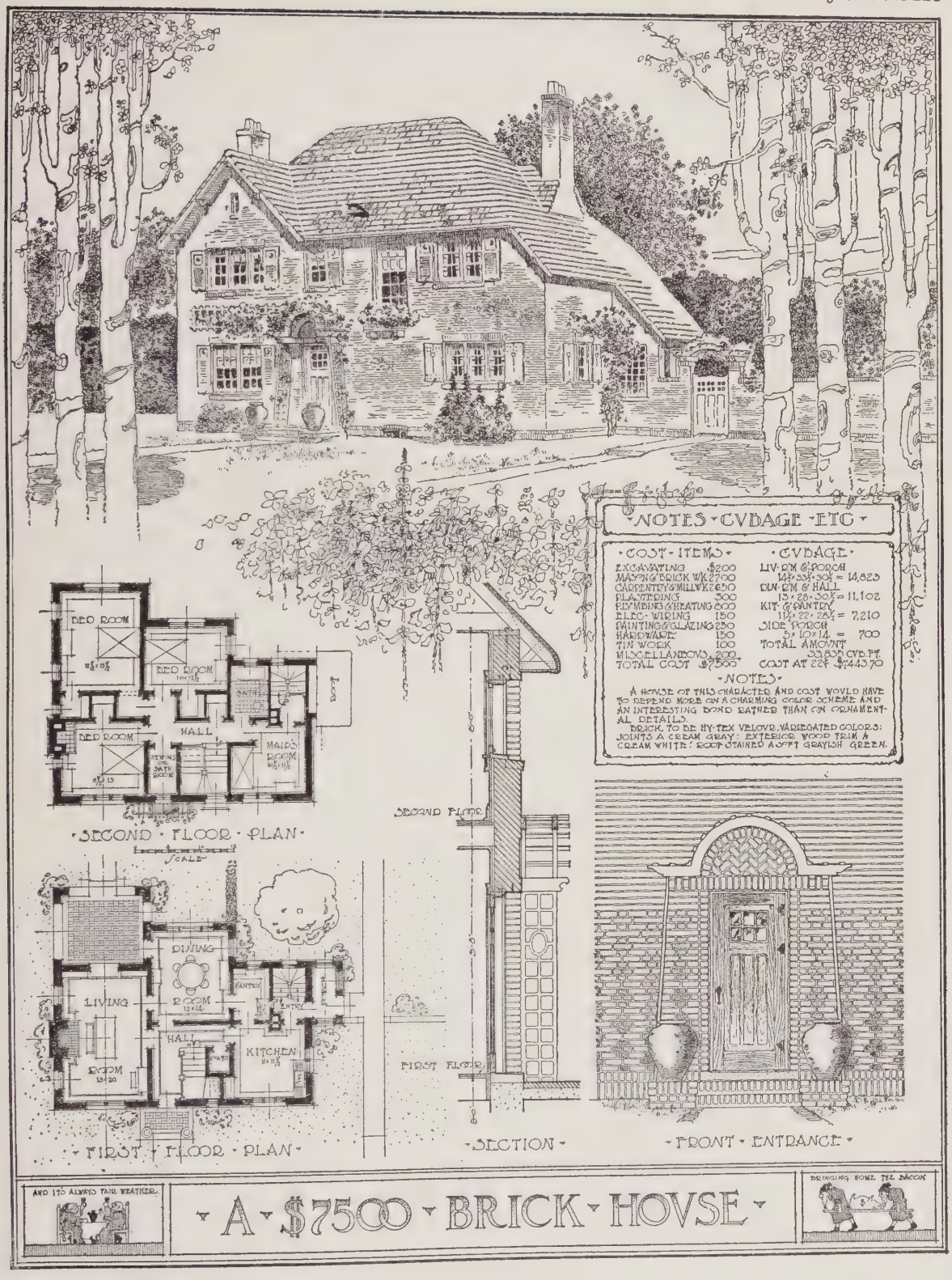


DETAIL OF ENTRANCE

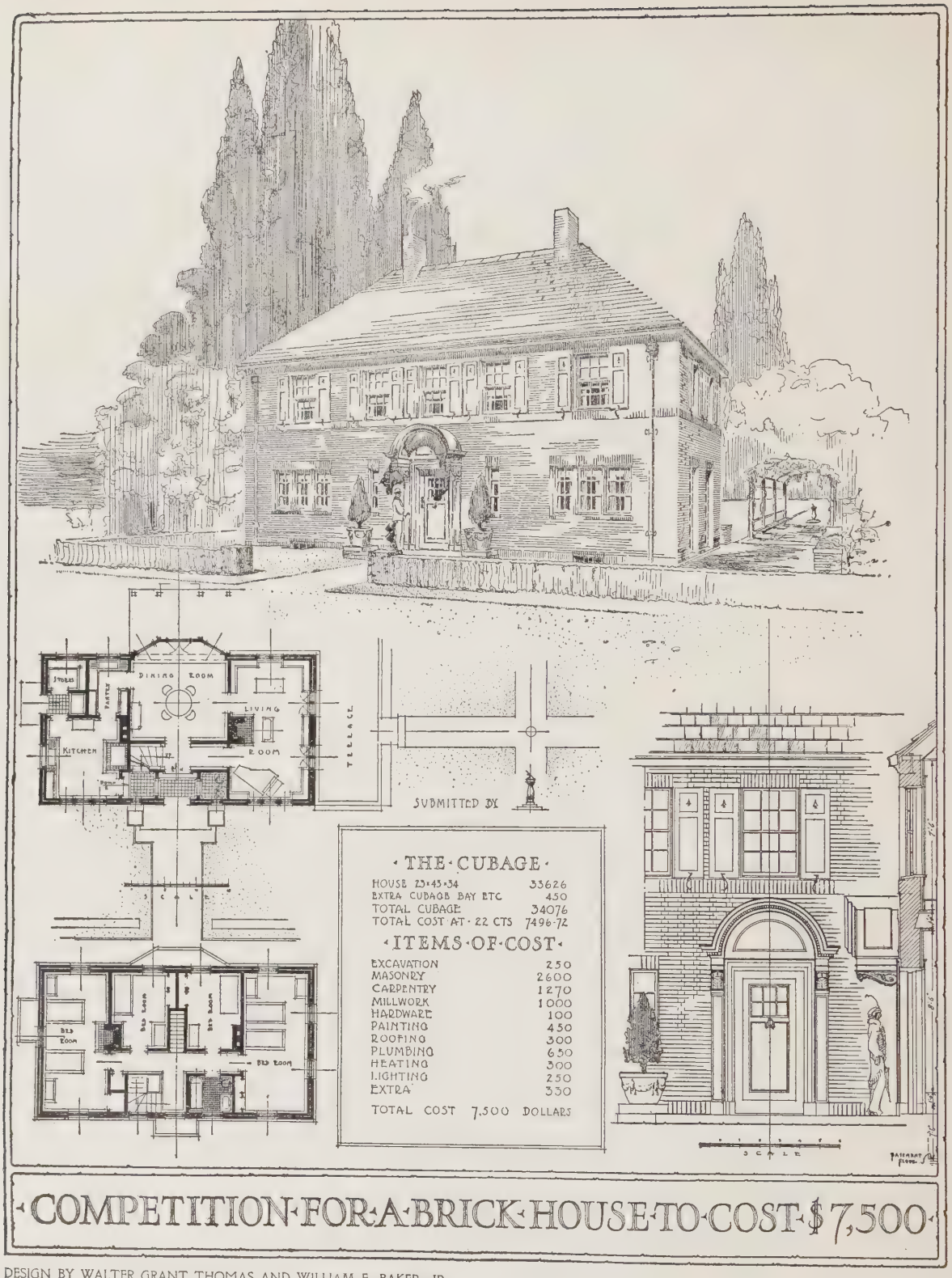
DESIGN BY EUGENE ROBERT SCHULZ
910 Tribune Building, Chicago, Ill.



DESIGN BY LOUIS C. ROSENBERG
169 St. Botolph Street, Boston, Mass.



DESIGN BY OSCAR T. LANG
345 McKean Dormitory, U. of P., Philadelphia, Pa.



THE CUBAGE

HOUSE 23·45·34	33626
EXTRA CUBAGE BAY ETC	450
TOTAL CUBAGE	34076
TOTAL COST AT 22 CTS	7496·72

ITEMS OF COST

EXCAVATION	250
MASONRY	2600
CARPENTRY	1270
MILLWORK	1000
HARDWARE	100
PAINTING	450
ROOFING	300
PLUMBING	650
HEATING	300
LIGHTING	250
EXTRA	330
TOTAL COST	7,500 DOLLARS

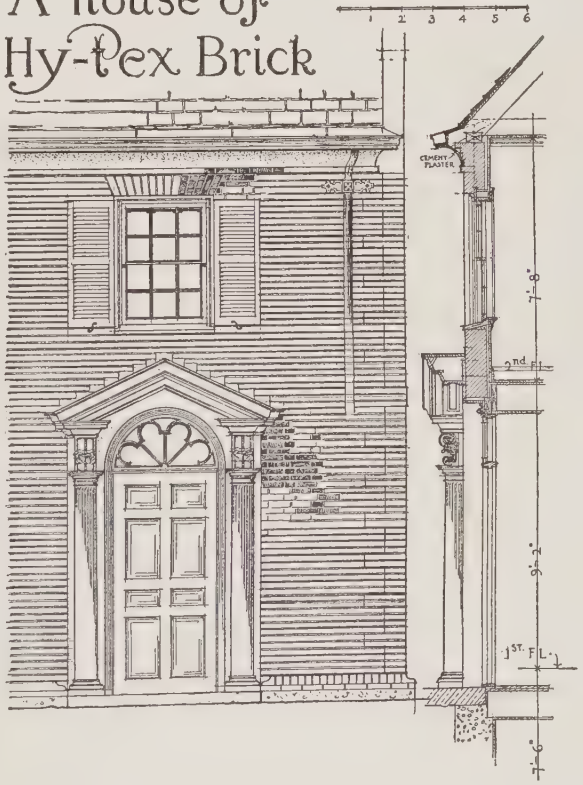
COMPETITION FOR A BRICK HOUSE TO COST $7,500

DESIGN BY WALTER GRANT THOMAS AND WILLIAM E. BAKER, JR.
101 Park Avenue, New York, N. Y.

Scale for Plans

A house of Hy-tex Brick

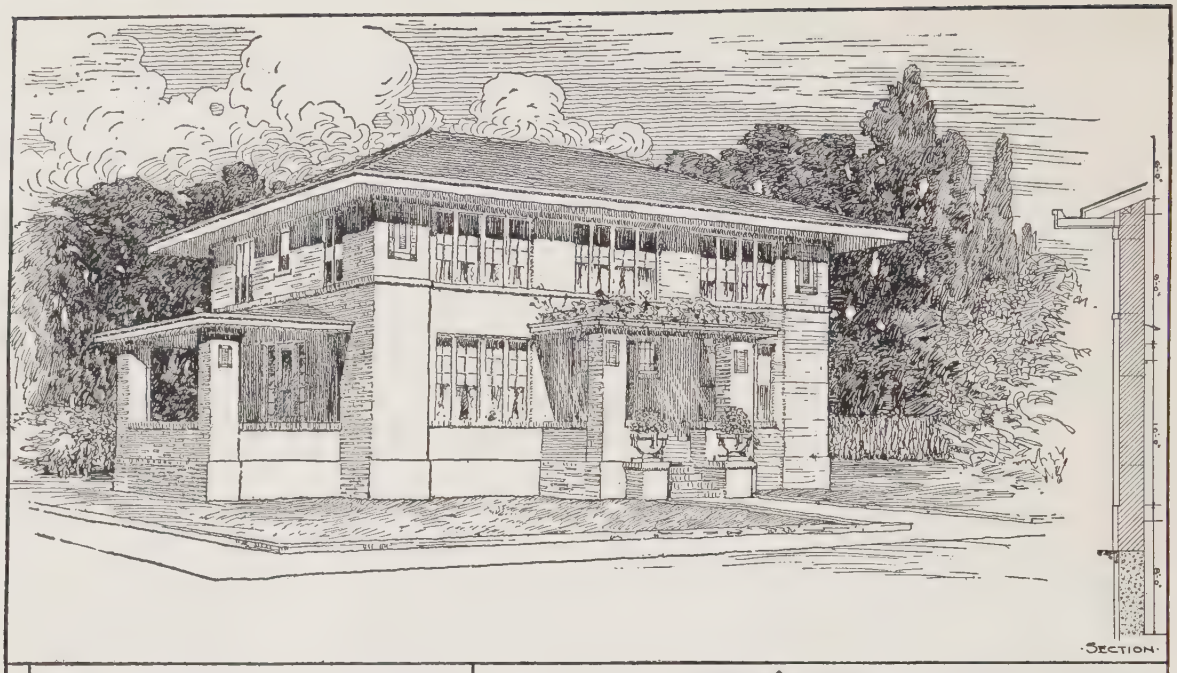
Scale for Details



MAIN PORTION	22X46X30=	30360
KITCHEN ELL	9X18X18 =	2916
PORCH	¼ OF 8X20X12=	480

TOTAL CUBE=33756
AT 22¢ PER CU-FT =
$7,426.32

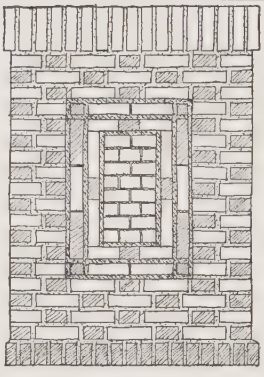
DESIGN BY CHARLES W. CLEARY
120 Boylston Street, Boston, Mass.



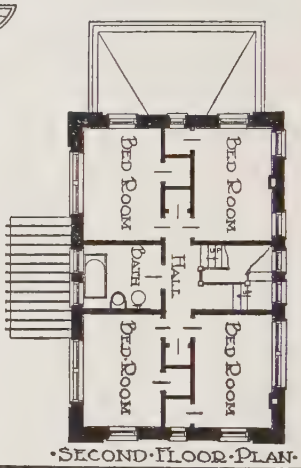
SECTION

$7500.00 HYTEX BRICK HOUSE COMPETITION OF "THE BRICKBUILDER"

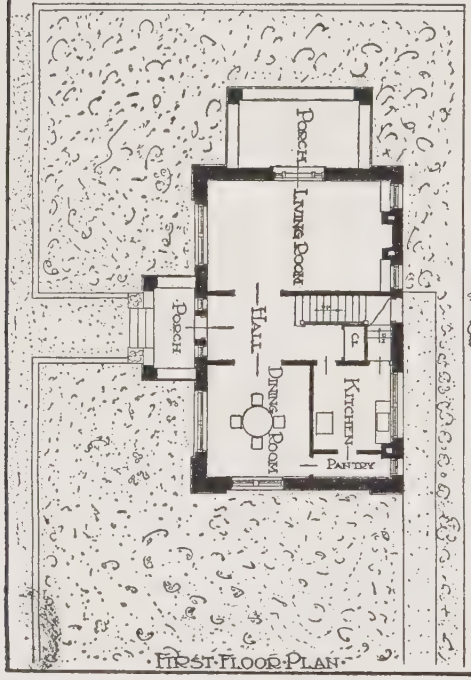
SUBMITTED BY



DETAIL OF BRICK



SECOND FLOOR PLAN



FIRST FLOOR PLAN

ELEVATION

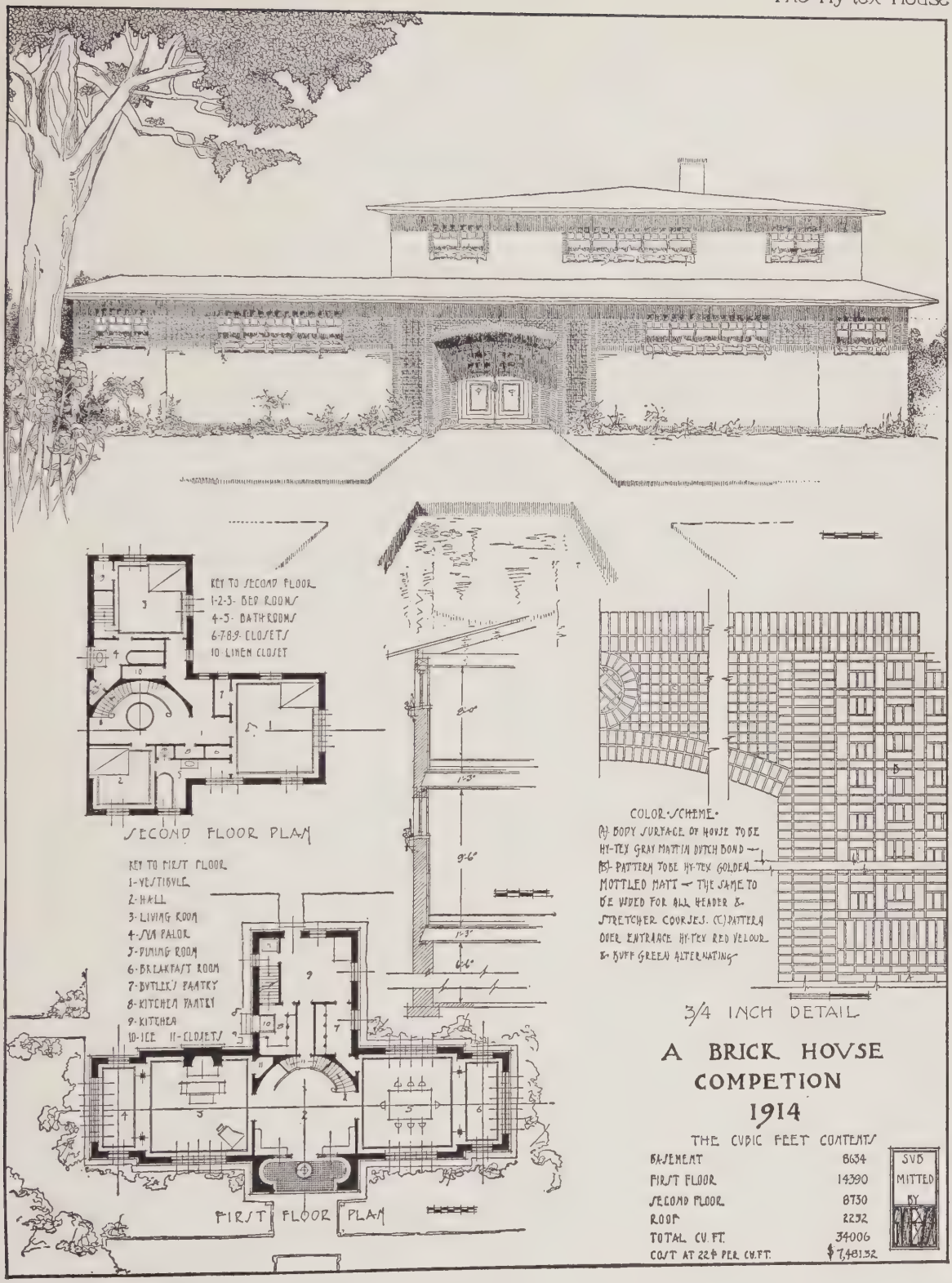
0 5 10 15 20
SCALE OF PLANS

CUBIC CONTENTS

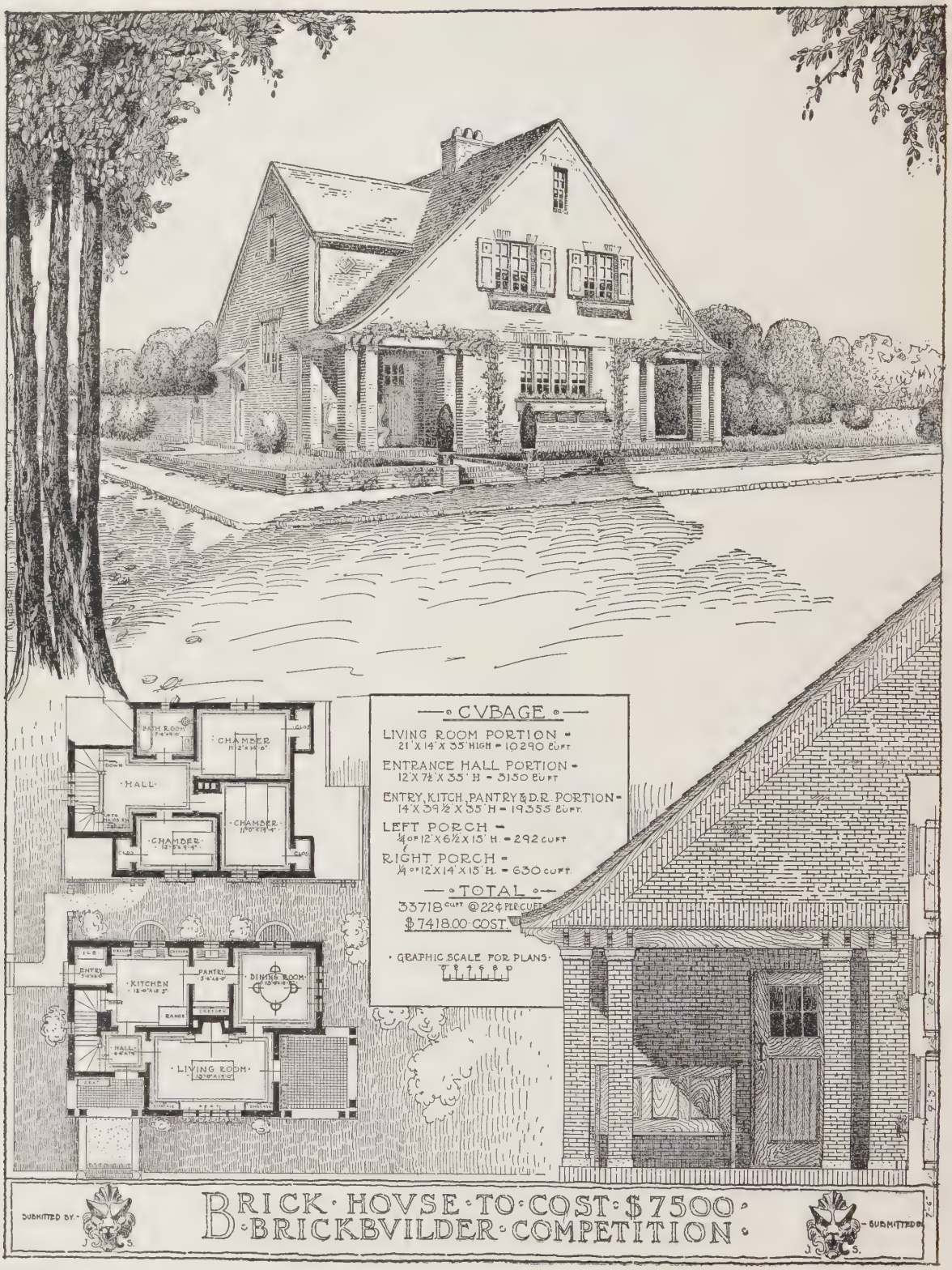
BASEMENT 40X26X8X.22	1830.40
1ST STORY 40X26X10X.22	2288.00
2ND STORY 40X26X9X.22	2059.20
ATTIC 40X26X4X.22	915.20
PORCH $\frac{18X10X18}{4}$ X.22	178.20
PORCH $\frac{18X10X13}{4}$ X.22	138.60
TOTAL	$7409.60

= RICH BROWN
= DARK STEEL GREY MATTS
DARK BROWN MORTAR JOINT $\frac{3}{4}$" WIDE

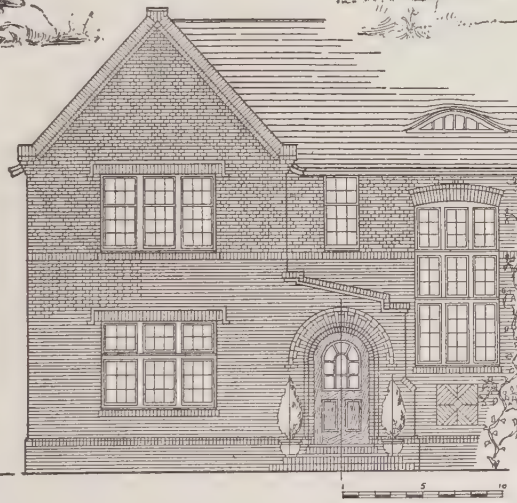
DESIGN BY JACK TRAVNICEK
720 Tribune Building, Chicago, Ill.



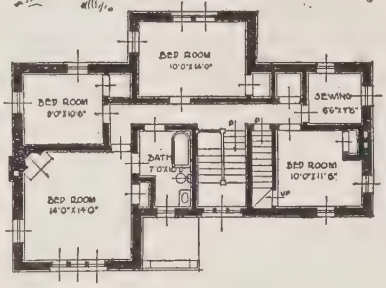
DESIGN BY JACK FRANK
43 West 48th Street, New York, N. Y.



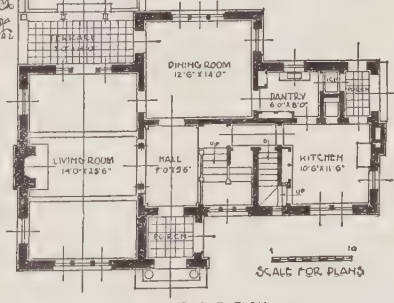
DESIGN BY JAMES M. SCHEINER
770 Linden Street, Brooklyn, N. Y.



SCALE FOR ELEVATION



SECOND FLOOR PLAN



SCALE FOR PLANS

FIRST FLOOR PLAN

COLOR SCHEME

COPINGS, ALL TRIM, STEPS, AND FIELD OF PATTERN IN UPPER STORY TO BE OF "DARK GREY MATT" HY-TEX BRICK. LOWER STORY OF FLEMISH BOND WITH DARK HEADERS - ALL OTHER BRICK WORK OF "LIGHT GREY MATT."

CUBAGE

HEIGHT OF STORIES - CELLAR		7'0"
MAIN FLOOR		8'6"
SECOND FLOOR		8'0"
3/8 DISTANCE FROM HIGHEST CORNICE TO ROOF		6'0"
TOTAL HEIGHT		31'6"
AREA OF MAIN PORTION - 45'6"X19'X31'6"	27231.75	CU.FT.
" LIVING ROOM WING - 16'X6'6"X31'6"	3276.	" "
" DINING ROOM WING - 16'X6'6"X31'6"	3276.	" "
" PORCH 7'X6'6"X11'6"+4	120.31	" "
" STEPS 2'X8'X2+4	8.	" "
" TERRACE 15'X6'6"X2+4	48.75	" "
TOTAL CUBAGE	33971.80	" "
AT A COST OF 22¢ PER CU.FT.	$7468.17	

ITEMS OF APPROXIMATE COST

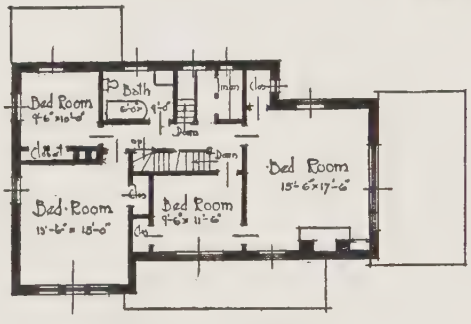
EXCAVATING	$ 320	ELECTRIC WIRING	$ 100
BRICK	1200	HARDWARE	100
PLASTERING	650	PLUMBING	600
LUMBER-CARPENT	1300	HOT AIR HEATING	200
MILLWORK	1150	MISCELLANEOUS	1000
PAINTING	400		

SUBMITTED BY

BRICK HOUSE TO COST $7500
BRICKBUILDER COMPETITION

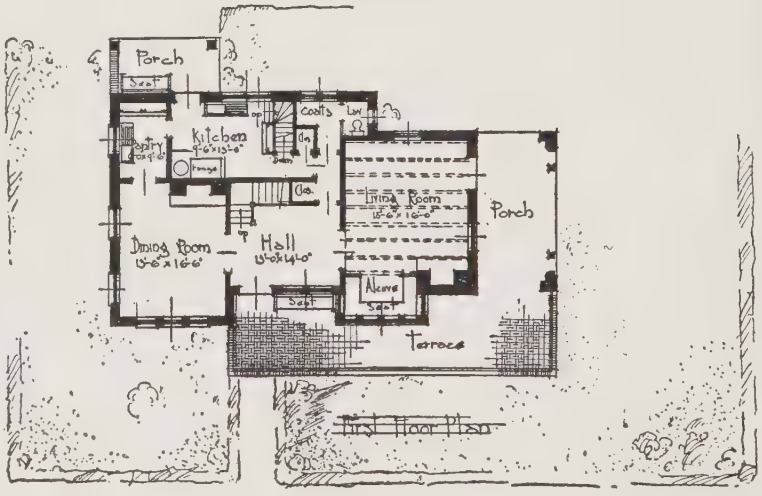
DESIGN BY WILLIAM VAN KLEECK SHEPARD
4823 Warrington Avenue, West Philadelphia, Pa.

Section



Second Floor Plan

Detail of Entrance



First Floor Plan

COMPETITION FOR A SEVENTY-FIVE HUNDRED DOLLAR BRICK HOUSE

Basement Area	1173 sq.ft
First Floor Area	1173 sq.ft
Second Floor Area	1133 sq.ft
Porch Area	630 sq.ft
Cubage Basement to Second Floor level	18768 cu.ft
Cubage Second Floor to ⅜ of Roof	13596 cu.ft
¼ Porch Cubage	1463 cu.ft
Total Cubage	33827 cu.ft
At 22¢ cu.ft.	$7.441.94

Alternate header and stretcher courses dark red Hy-Tex Brick.
Buff Hy-Tex brick for Fireplaces

Floor Plans

Detail

SUBMITTED BY

DESIGN BY ANTON A. LETZGUS
1218 Chestnut Street, Philadelphia, Pa.

COLOR SCHEME

BOKHARA HY-TEX BRICK OF VARIOUS SHADES OF DARK BROWNISH REDS, LAID PROMISCUOUSLY FLEMISH BOND, FLUSH JOINTS ¼ INCH WIDE

SCALE FOR PLANS & SECTION 0 1 2 3 4 8 12

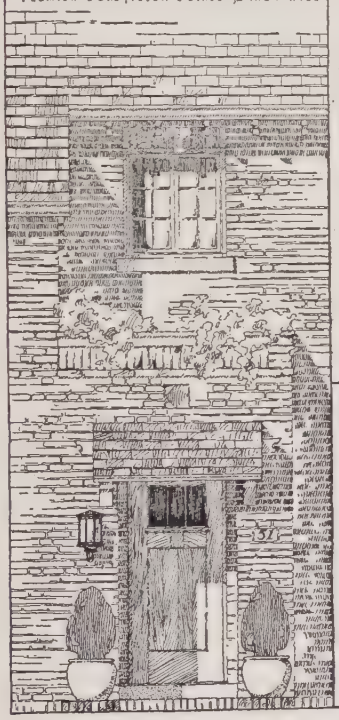
SCALE FOR DETAIL 0 1 2 3

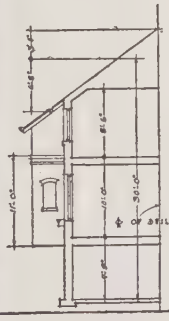
CUBIC CONTENTS

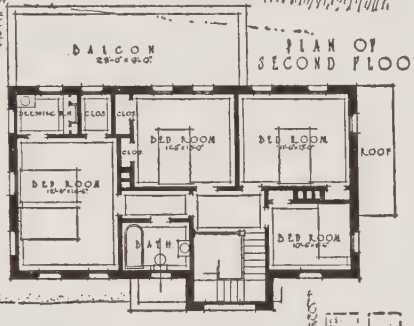
CUBIC CONTENTS OF MAIN BUILDING = 44x24x30+4x11x30	33000
FRONT AND REAR PORCHES 30x10x11+4x4x11	902
KITCHEN ADDITION 16x12x8½	180
TOTAL CUBIC CONTENTS	34082
TOTAL COST 34082 x 0.22 =	$7497

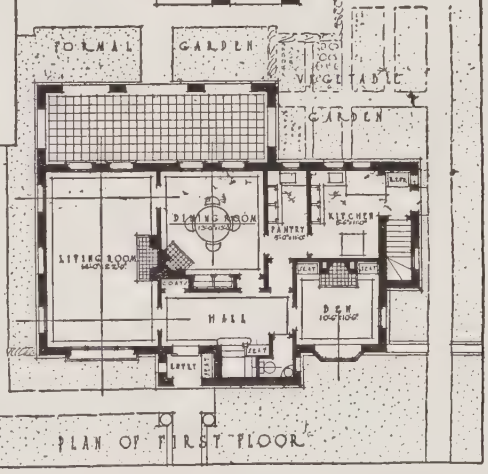
ITEMS OF COST

EXCAVATING	175
BRICKWORK	2360
PLASTERING	485
LUMBER AND CARPENTRY	1510
MILLWORK	1100
PAINTING	220
HARDWARE	100
ELECTRIC WIRING	200
PLUMBING	450
HEATING	300
MISCELLANEOUS	600
TOTAL COST	$7500







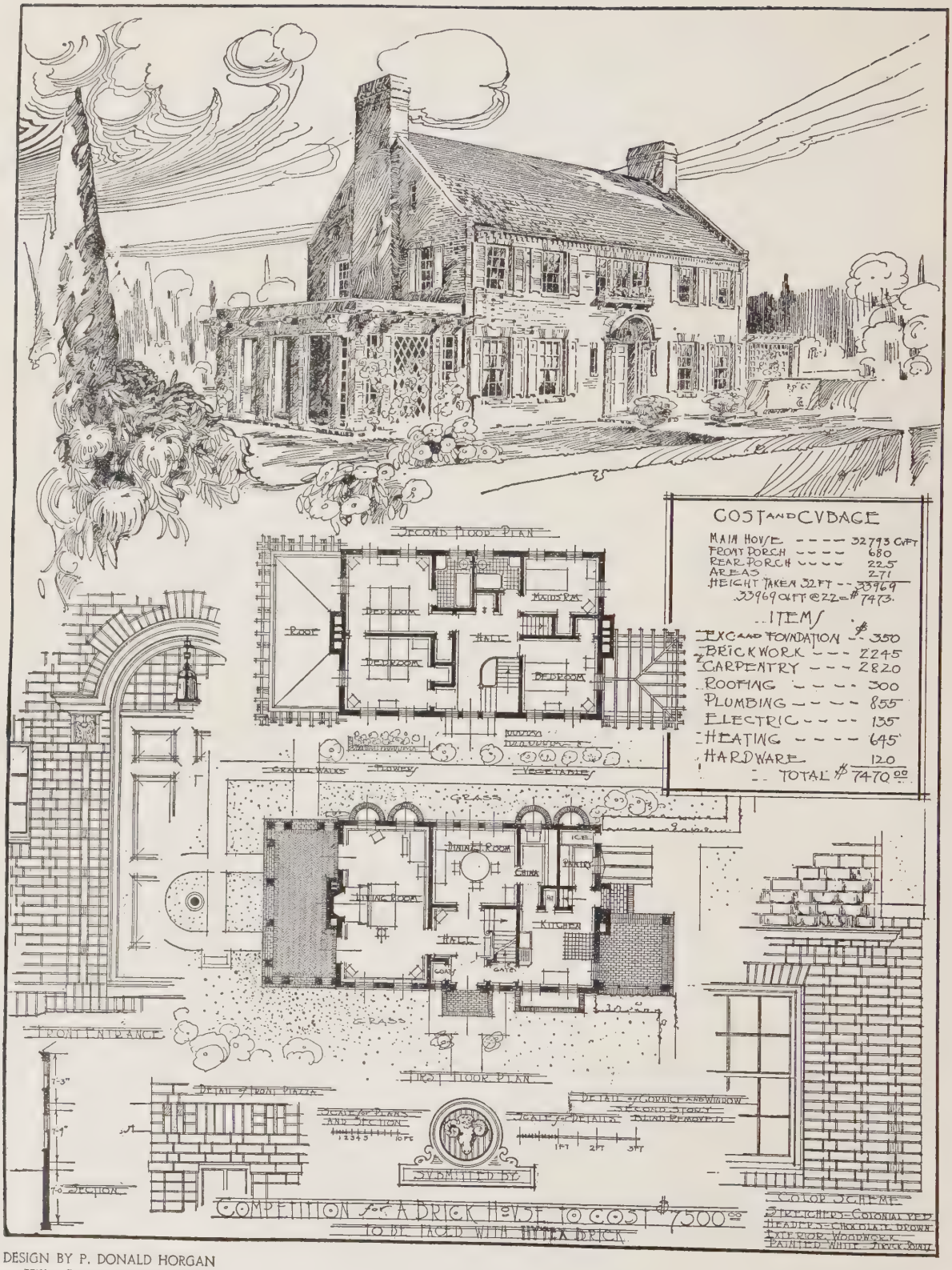


SUBMITTED BY

A BRICK HOUSE TO COST 7500 DOLLARS TO BE FACED WITH HY-TEX BRICK.

BRICKBUILDER COMPETITION FEBRUARY 1914

DESIGN BY LOUIS JUSTEMENT
Box 1191, Waco, Texas.

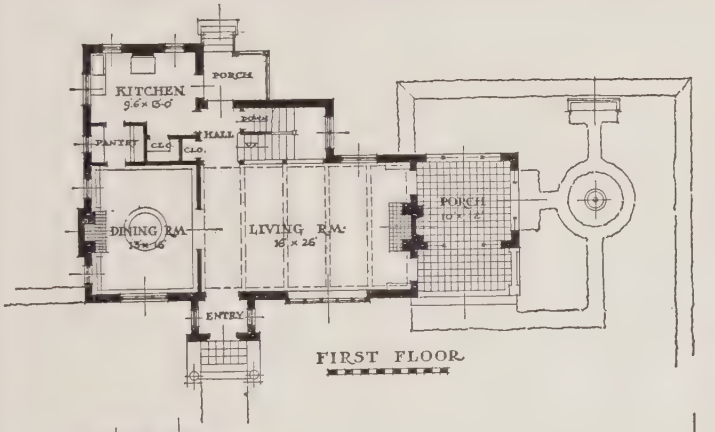


DESIGN BY P. DONALD HORGAN
14 Kilby Street, Boston, Mass.

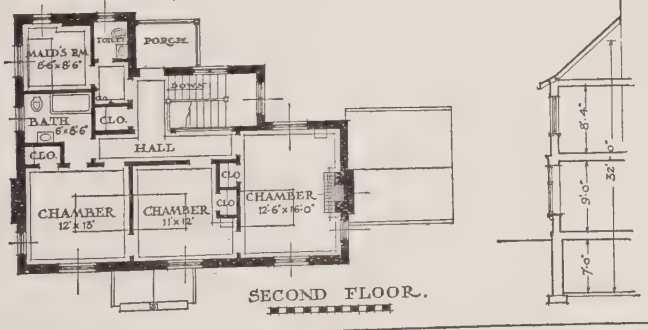
SUBMITTED BY

COMPETITION FOR A BRICK HOUSE TO COST SEVEN THOUSAND FIVE HUNDRED DOLLARS.

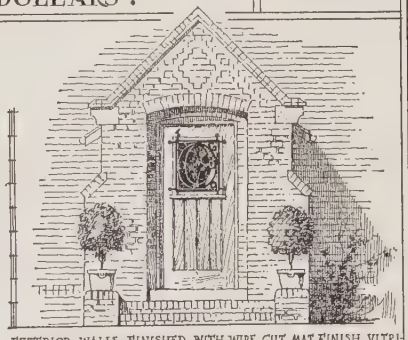
BRICK BUILDER COMPETITION



FIRST FLOOR



SECOND FLOOR.



EXTERIOR WALLS FINISHED WITH WIRE CUT MAT FINISH VITRIFIED RED BRICK (KILN RUN); ALL SHADES MIXED HAPHAZARD. GARDEN WALL BOND. DIAPER PATTERN LAID WITH ORDINARY HARD RED BRICK WITH BLACK HEADERS SCATTERED.

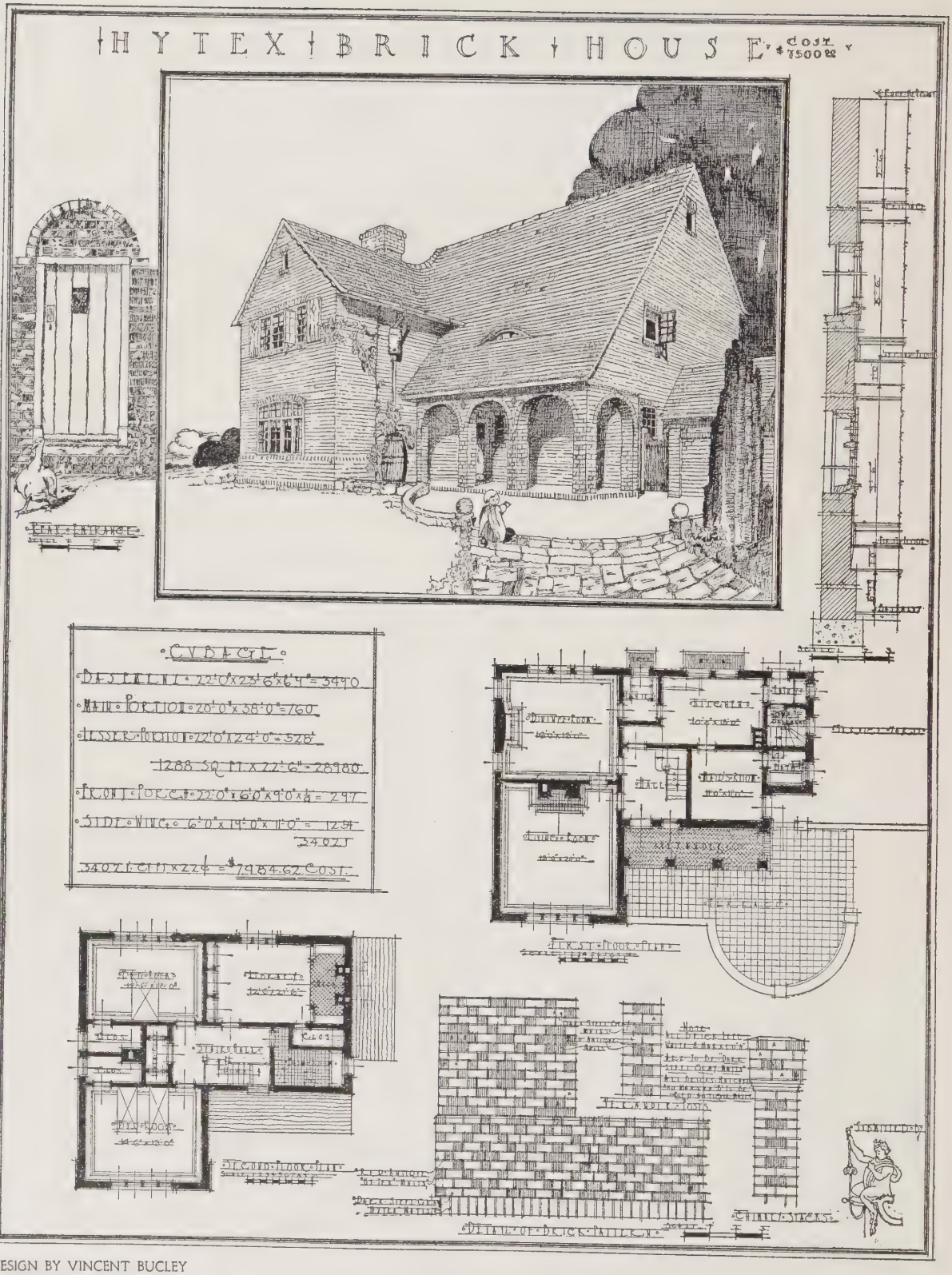
CUBIC CONTENTS

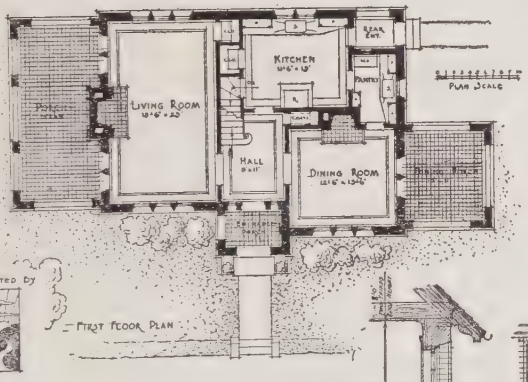
MAIN BLDG.	41·6 × 18 × 32 =	23 904	PORCHES
REAR BLDG.	15 × 14·6 × 28 =	6 076	13×12×12 = 1872
STAIRS	7 × 16 × 28 =	3 136	6×8×10 = 480
VESTIBULE	5 × 8 × 10 =	400	2352 ÷ 4 = 538
TOTAL CUBAGE	34 054 @ 22¢ PER CUBIC FOOT =		$7500.00

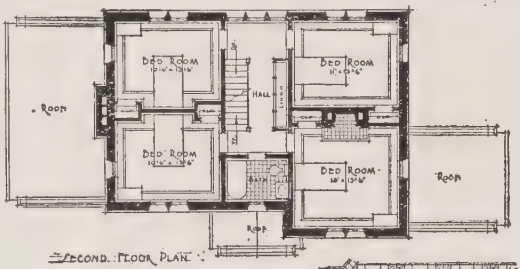
ESTIMATE OF LABOR & MATERIALS

EXCAVATION	$ 90.00	PLASTER	$350.00
CONCRETE	450.00	PAINTING & GLAZG.	325.00
BRICKWORK	1500.00	HARDWARE	75.00
STEEL	150.00	PLUMBING	610.00
SHEET METAL	100.00	ELECTRIC WORK	100.00
SLATE	425.00	GRANITOID	75.00
LUMBER	550.00	MISCELLANEOUS	150.00
MILL & STAIRS	950.00	CONTRACTOR'S PROFIT	600.00
LABOR	1000.00	TOTAL COST	$7500.00

DESIGN BY E. L. PLEITSCH AND D. STEPHEN, JR.
408 Board of Education Building, St. Louis, Mo.


HY TEX BRICK HOUSE
cost $7500
CUBAGE
DESIGN BY VINCENT BUCLEY
197 Coleridge Street, San Francisco, Cal.





SECOND FLOOR PLAN

SUBMITTED BY

FIRST FLOOR PLAN

DETAIL SCALE

BRICKBUILDER COMPETITION FOR A BRICK HOUSE

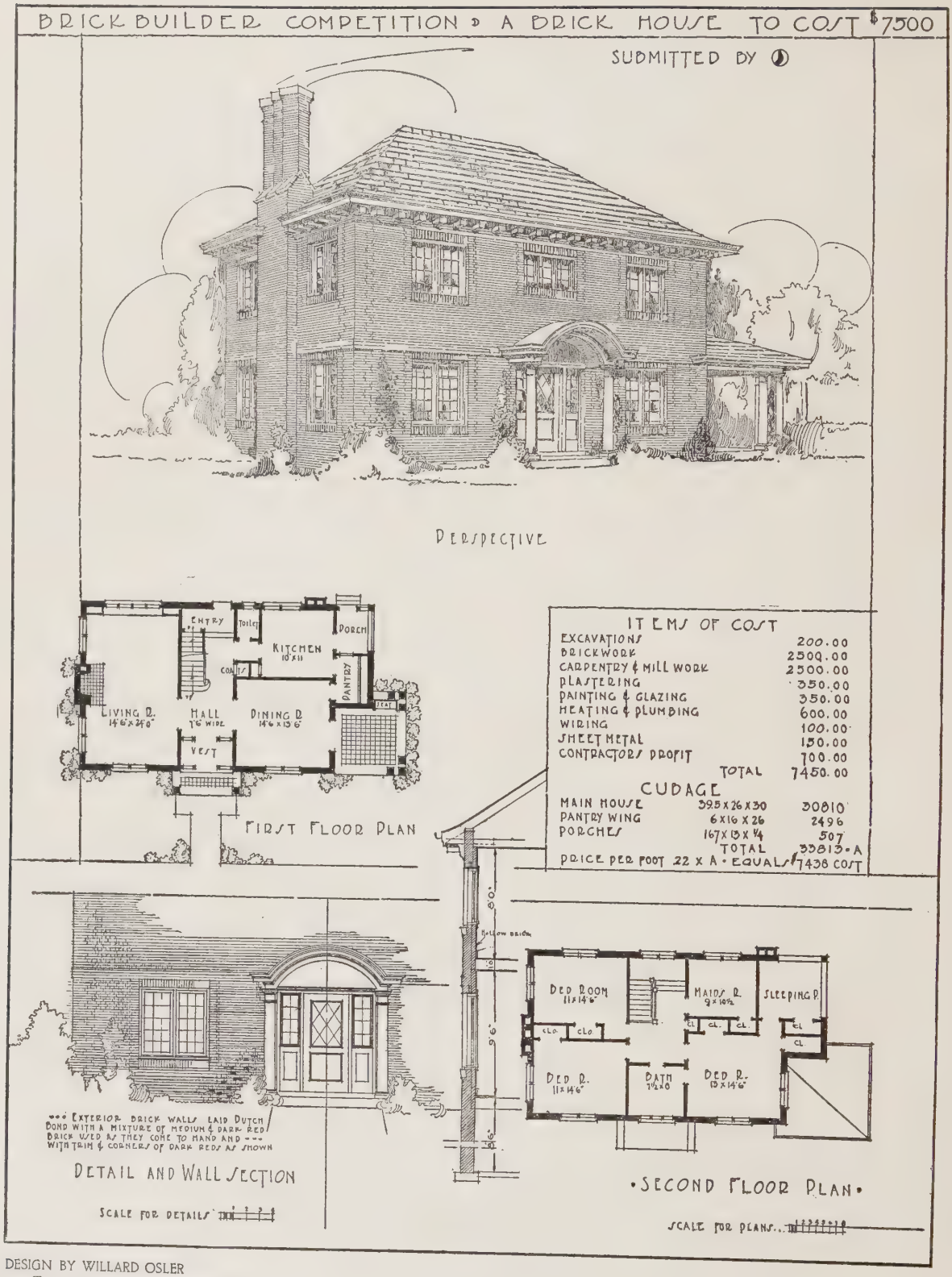
CUBICAL CONTENTS

MAIN BUILDING	25×35×35	= 31350
DINING RM. EXTEN.	3×15×6×31	= 1442
LIVING RM. PORCH	24×11×11×¼	= 726
DINING RM. PORCH	13×11×11×¼	= 394
ENTRANCE PORCH	3×6×9×½	= 137
TOTAL CUBIC FEET		34049
TOTAL COST AT 22¢		= $7490.78

ITEMS OF COST

EXCAVATION	150	PLUMBING	400
MASONRY	3600	HEATING	275
CARPENTRY	2150	ELECTRIC	140
SLATE ROOF	275	PAINTING	310
HARDWARE	100	MISC. EXPENSE	100
TOTAL COST			$7500

DESIGN BY GEORGE H. SCHWARTZ
127 India Street, Brooklyn, N. Y.

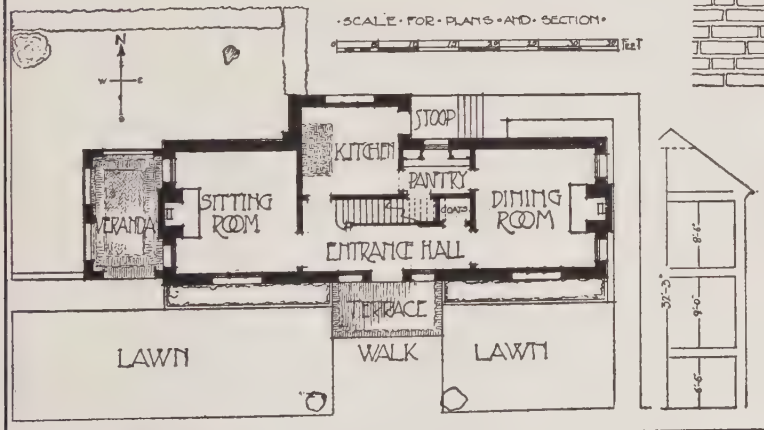


DESIGN BY WILLARD OSLER
341 Trenton Street, Indianapolis, Ind.

THE BRICKBUILDER COMPETITION FOR A HY-TEX BRICK HOUSE

THIS DESIGN SUBMITTED BY H. T. BRICQUE ARCHITECT PRESSVILLE

BRICKS USED ARE ST LOUIS MATT OF GENERALLY A RICH WARM RED TO BROWN TONES WITH LIGHTER CENTRES AND PICKED OUT WITH HEADERS OF A SOFT PURPLE BROWN PANELS SET OUT IN SHADES OF BUFF PURPLE TO DARK RICH BROWN

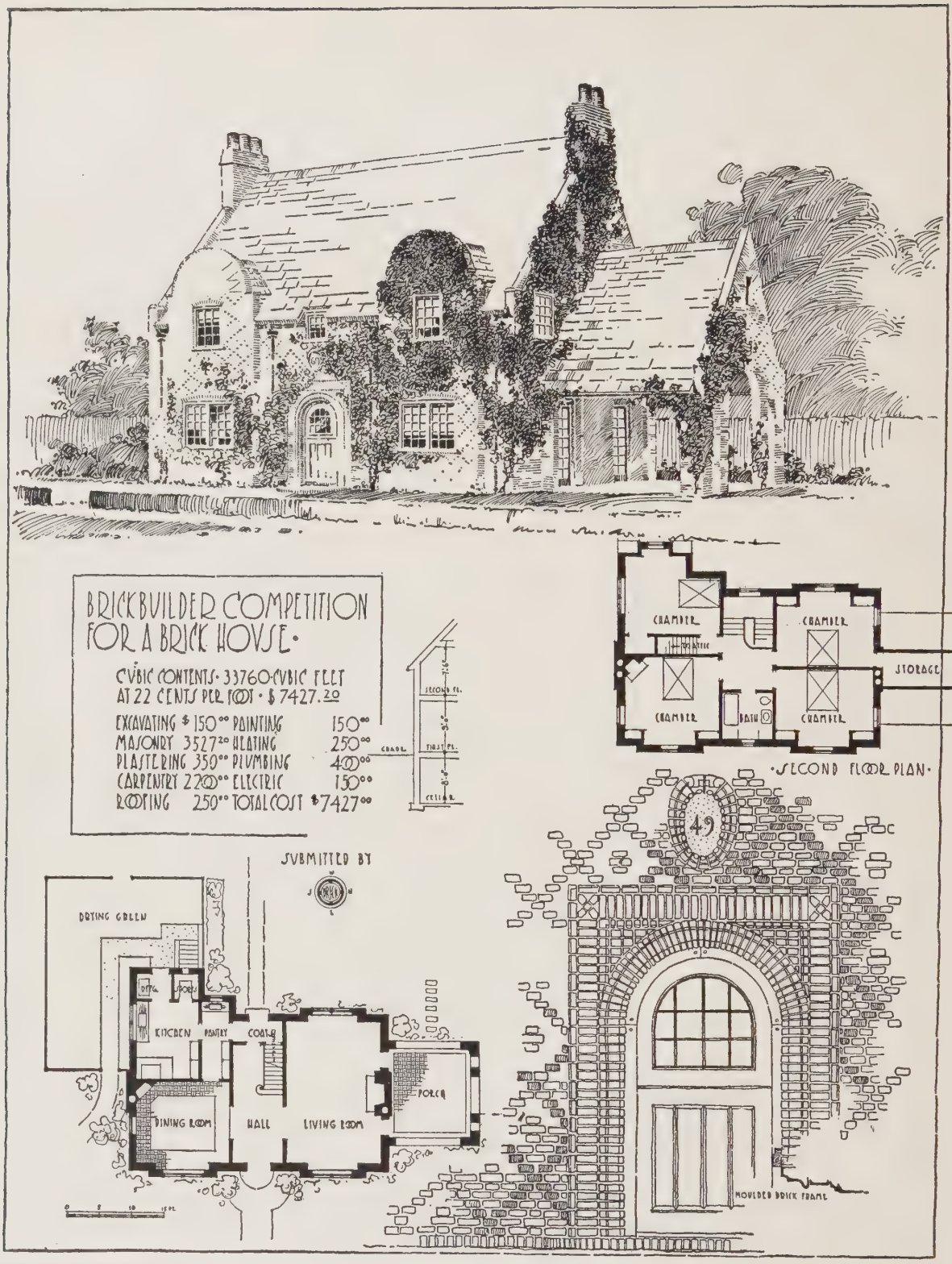


CUBIC ESTIMATE OF COST

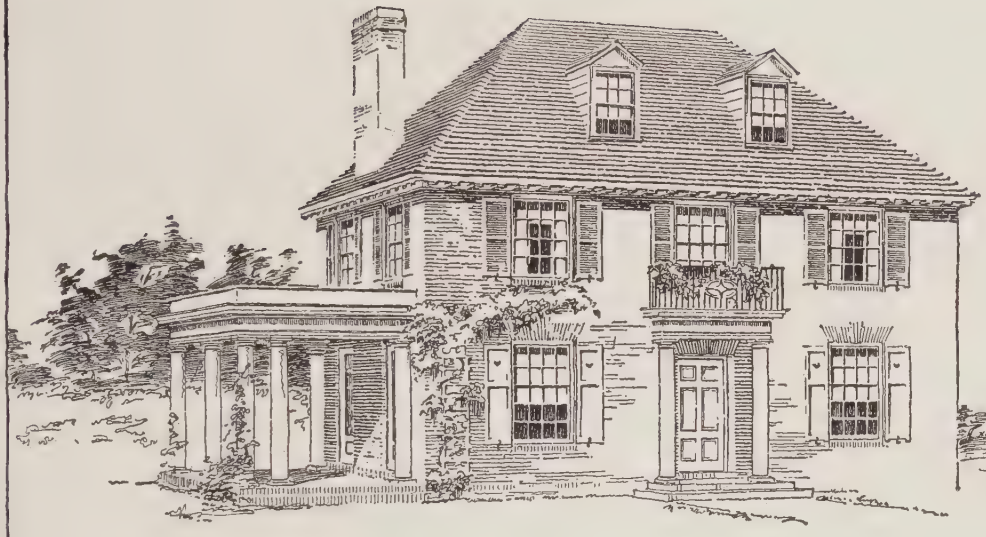
MAIN BUILDING	54·6×17·6×32·3 =	30758·6 CU FT
	14·9×5·6×32·3 =	2604·2 "
PORCH	½×9·9×16·0×14·0 =	546· "
STOOP	½×6·0×5·6×3·0 =	29· "
TERRACE	½×13·0×7·0×2·0 =	45· "
	TOTAL	33982·8 "

AT RATE OF 22 CTS PER FOOT
COST IS $7.476·21

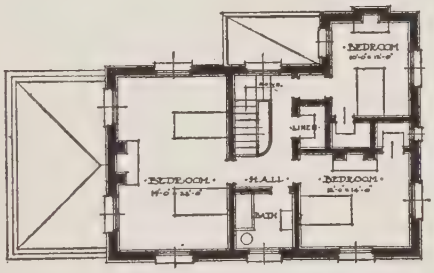
DESIGN BY CYRIL J. BREWSTER
2329 Van Ness Avenue, San Francisco, Cal.

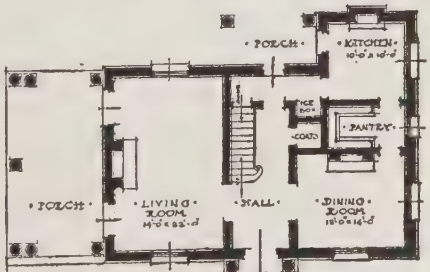


DESIGN BY GEORGE A. LICHT
4 East 39th Street, New York, N. Y.

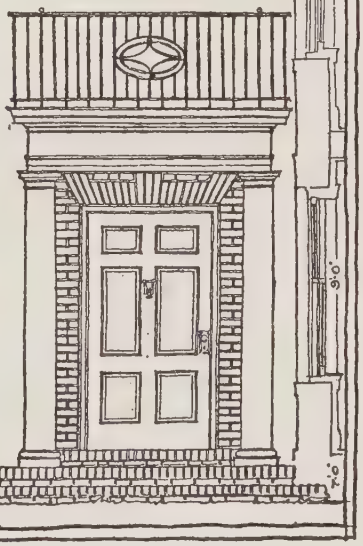


· COMPETITION ·
· FOR · A · BRICK ·
· HOUSE · TO · COST ·
· $7500 · · BY





· SCALE ·



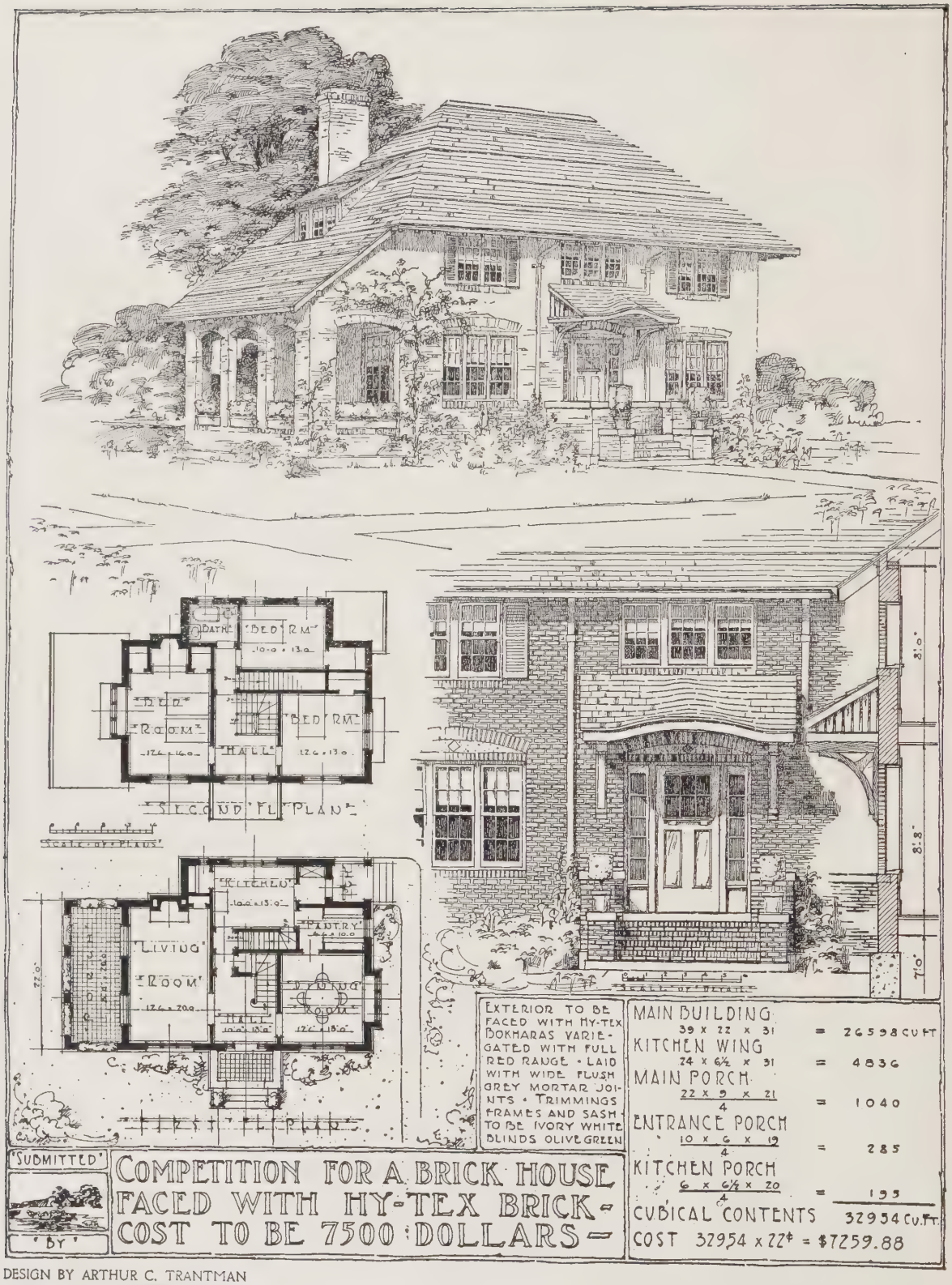
· CUBAGE ·

AREA · 996' · HEIGHT 33'0"
32868 CUBIC FT · AT · 22¢
COST · OF · HOUSE · 7230·96
PORCHES · AREA · 336' BY 12'0"
4032 CUBIC FT · 25% = 1008
1008 CUBIC FEET · AT · 22¢
COST · OF · PORCHES 221·76
· TOTAL · $7452·72

COST

EXCAVATING 320 · ELEC · WIRING 90
BRICKWORK 2050 · PLUMBING 800
PLASTERING 300 HARDWARE 310
CARPENTRY 1500 HEATING · 250
MILLWORK 1200 · MISCELLANEOUS 380
PAINTING 300 · TOTAL $7500·00 ·

DESIGN BY O. J. ROBLING
812 Magee Building, Pittsburg, Pa.



DESIGN BY ARTHUR C. TRANTMAN
742 Seneca Street, Buffalo, N. Y.

The Function of An Architect

By AYMAR EMBURY II

THERE is certainly no profession, and perhaps no trade, about whose usefulness there exists a wider misapprehension than the profession of architecture. There are, of course, many incompetent architects just as there are many incompetent lawyers and doctors, but the results of the architect's incompetence may be plainly read in his buildings while the incompetence of the other two professions are hidden in the mysteries of the law or of the human body.

A reason for the occasional prejudice against the architect as a necessary evil is misapprehension regarding his true function; and this article is intended to make clear some features about which there exists a doubt.

In the first place, the architect is not a contractor; he does not actually build houses nor hire others to build them for him. His duties are: First, to design the building, make the necessary drawings and write the specifications from which the house is to be built; secondly, to superintend the building; that is, to see that the materials described in the specifications are placed in the positions shown on the drawings. There are, beside these two principal duties of the architect, certain others of a secondary nature which are also necessary during the process of construction.

It is the architect's duty to prepare the necessary contracts in behalf of the owner; and his legal knowledge must be sufficient to safeguard the owner's interests without making the contract unfair to the builder, since a contract that is not fair to all parties concerned will not be upheld in law. He must certify to the amounts due the contractor by the owner as the work proceeds and this means that he must be conversant with the prices of materials and the cost of labor, since over-certification or under-certification may, and often does, result in legal controversy. In addition to these duties the architect is almost always depended upon to act, at least in an advisory capacity, as landscape architect, showing how the house shall be placed upon the lot with the best relation to roads, trees and other surroundings. The direction of paths and the location of shrubbery is very often done under the architect's supervision,

as it ought always to be. The selection of materials and colors for the decoration of the interiors should be influenced by his advice. It will be seen, then, that the architect's usefulness covers a very considerable field outside his fixed and definite functions.

LET us now consider that part of the work which is more strictly an architect's business and with special reference to the sort of work which he would perform in building one of the houses illustrated in this book. In the first place, the designs here shown are only what are known as sketch designs; that is, a contractor could not build a house from them and secure anything like the effects obtained in the designs without having what are known as "working" drawings, which should be prepared by an architect. Before giving further consideration to drawings and specifications, let us treat of the preliminary steps that need to be taken by the architect in serving the interests of the client who comes to him for a house. It is necessary at first to ascertain approximately the amount the owner wishes to spend on his house and what accommodations he will require. Most of the trouble that develops between architect and client is traceable in nine cases out of ten to the first interview, and the fault is at times chargeable to the architect, at times to the owner—and very often to both. If every owner came to his architect wanting only such a house as could be built for the sum which he has named there would be little or no difficulty, but in too many instances the owner wants just a little bit more than his money will pay for, and the architect's hope is that by some happy slant of fortune he may be able to accomplish what he knows to be well-nigh impossible. It is too often the case that the architect fails to warn his client with sufficient emphasis that he is asking too much. It very often happens that the house wanted at a given cost is possible, if the cheaper materials and simplest form of interior finish, painting and plumbing, are used; and the architect tells his client that the house can be built in this simple manner for the stipulated sum only to find that the word "simple" means one thing to the owner and another to himself. Little words like "simple" and "inexpensive" have a wide variety of meaning. They are comparative and not positive and are liable to open a wide field for controversy. Consequently greater explicitness at the very first interview on the part of both the owner and the architect would

result in harmonious relations in most of the cases where trouble now arises.

An owner really should give all his instructions to the architect in writing, in order that his own interests may at all times be protected. This arrangement is equally advantageous to the architect. A record of instructions given over the telephone should be carefully noted by both parties and confirmed in writing.

PROBABLY most, if not all, of the houses illustrated in this book could be built, and rather well, for the limit of cost given in the competition program—$7500 — in districts where brick and labor are not expensive. I believe, however, that if it were contemplated to build them within twenty miles of the cities of New York or Philadelphia it would be necessary to forego oak floors and tiled bath rooms in order to keep the cost within the limit set. In scaling down the cost of a house, the architect's real problem is to preserve to the owner those features which he considers essential in design and cut out those materials which are not absolutely necessary. It is a well known fact that many clients give their architects as a fixed limit of cost an amount varying from ten to fifty per cent below what they actually expect to spend, in the belief that the architect consciously endeavors to make him spend more than he wants, whereas in fact the opposite is the case. It is a very natural desire for an architect to do all that a client demands, and his eagerness to obtain and hold a commission frequently leads him to promise more than his best judgment tells him can be given. This is manifestly unfair and unnecessary; for, by tactful explanation and by comparison of the proposed house with others of the same size actually built, it can be shown any reasonable client just about what can be built for the amount to be expended.

Now as to the sketches themselves; a simple pencil drawing which may not have taken half an hour to make often represents the result of a week's study of the problem in an endeavor to secure a perfect plan or an unusually attractive elevation, not on paper alone but when built. After these sketches are shown to a client, he may want certain changes made in the plans; he may not entirely like the exterior and suggest certain changes, and these the architect must accomplish without impairing his general scheme or injuring the appearance of the house. Even trivial changes of this kind are

sometimes very difficult to make. In one case which came under my observation, an owner wanted an additional closet in his own bedroom, and his architect chased that closet around from room to room for three days trying to find some place where it could be put, without making a bump in one corner of some room. He finally decided to make an entirely new plan rather than spoil the house in this comparatively unimportant respect.

When the sketches have been pretty well decided on, the architect proceeds with the working drawings and specifications. These drawings—which are sent out for estimate—are of the several floors at a scale of one quarter inch to the foot, with elevations of the four sides and sometimes a cross section through the house at the same scale, and not infrequently several sheets of larger scale detailed drawings of wainscot, mantels, doorways and such things, which cannot be fully explained by small drawings or by the specifications. These drawings are the most expensive things and the most important that have to be done, since they must be very exact. All dimensions of the wall thickness, the room sizes, and the positions of windows and doors, must be given; roof slopes must be determined and very careful consideration paid, not so much to the drawings themselves, as to the appearance of the building when executed.

The working drawings are deceptive to the client, since they show in only two dimensions what will be executed in three; and lack of comprehension of working drawings is, next to the question of cost, the commonest source of trouble between the owner and the architect. People who are capable of reading plans find practically no extras involved in the construction of the building; they know in advance how things are going to look with somewhat the certainty of an architect. But people who know nothing about reading plans find that rooms which on paper look big enough, in reality are small, and that arrangements of windows which on plan appear to suit their furniture, when built, do not give them the space they require; and changes need to be made which involve extras for which they blame the architect and not themselves.

With the working drawings goes the specification, and the average specification for the construction of a house, such as illustrated in this book, is a little document of from fifteen to twenty thousand words, not one of which can be omitted without giving a contractor a loophole to escape from his just obligations. In these specifications

must be incorporated every instruction that the owner has given to the architect about the sort of floors and the color of paint, the types of bath tubs, the positions of electric light switches, the materials of which the house is to be built, the kind of kitchen range needed, where mirrors and towel bars are to be placed, and everything of that sort; and an architect must be very alert not to forget what may turn out to be the most desired thing in the house.

Working or scale drawings are made either on tracing cloth or tracing paper. From these, blue prints are made in numbers to supply contractors who are to give an estimate upon the work.

It is inadvisable, in fact unfair, to ask a contractor to bid on work when the owner feels that he will not be acceptable even though the lowest bidder. It is best for all concerned that only those contractors shall be invited to bid who can safely be entrusted to perform the work at the lowest figure submitted.

After estimates have been received, if the lowest one amounts to more than the owner feels himself able to pay, the architect must then proceed with the most difficult and disagreeable part of his entire work, and that is the cutting out of items which can, or must, be spared without impairing either the usefulness of the house or its appearance. In many cases, in fact in the majority of cases, estimates will not exceed the amount the owner is willing to spend and contracts may be signed at once.

Contracts are generally made out in triplicate. One set with specifications is filed with the county clerk to protect the owner against liens which may lie against him if this legal procedure is not followed; one set is kept for the client; and the third is for the contractor. The architect then makes the full size detail drawings, or in some cases details at one-quarter full size, of all parts of the building which require special construction; and, while these details are not as expensive as the contract drawings, they nevertheless are very tedious and costly to make. Probably in a house of the size of those in this book, there would be issued about ten drawings for estimate and about fifteen full size details. A draughtsman would average three days work on each of these. If we assume that he gets four dollars a day (a reasonable price), these drawings would cost the architect about three hundred dollars; and this does not include overhead expenses, such as rent, stenographer, office boy, light, blue printing, materials and such things—nor any allowance for bad debts.

If the architect is to superintend the construction of the house—in some cases he does and in others he doesn't, depending entirely upon the agreement made with the client— he or his superintendent of works will make at least weekly visits to see that the work is being carried out according to the drawings and specifications. If during these visits he finds that bad work or materials are being employed, it is his duty to order the work done over again in a proper manner. There is usually a clause in specifications which requires that the contractor shall make good any defective work that may become apparent within a year after the completion of the house. It is customary for an architect to visit the house several times after it is occupied for the purpose of ascertaining if there are any defects which are attributable to bad workmanship, and if there are to insist that the contractor do the necessary repairing.

THE foregoing gives a fairly complete idea of what the architect does for his money, and may also show a prospective home builder that the money so spent is well earned. There are, however, two or three other points which should be touched on. First, it should be understood that the architect does not assume financial responsibility either for the cost of a house or for the mistakes made during its construction, unless these are due to negligence on his part. The owner in accepting the plans and specifications, which he does either before or when signing the contract, should see to it that everything that he wants is in the plans and specifications, since his acceptance of them will be held by any court to be proof that the architect has faithfully performed his duty. If anything is omitted from the specifications that the owner has told the architect he wants and has to be put in afterwards as an extra, it does not follow that the owner is paying twice for this item; for, if it had been in the original specifications, the original contract price would have been larger, since contractors make a list of every item to be done, price them, foot the total, and add a percentage or lump sum as a profit. The second point of extreme importance should be the realization by the owner that the architect's services are worth all he charges for them and often prove an actual saving to the owner.

If one were to go direct to a contractor with a book such as this, containing as it does very many beautiful designs, he would find many who would say: "I will build the house you like for so many

dollars." As has been repeatedly demonstrated, however, contractors cannot build houses from drawings like those shown here without the services of an architect for the reason that it requires a man specially trained to execute a house from a drawing. It must be remembered also that some one has to make working drawings, and if it is the contractor he has to include the cost of this work in his estimate, so that the owner does not save this part of the expense in letting the contractor do all the work, nor is he likely to get the same class of house he has in mind.

An owner dealing with a contractor direct, rather than through an architect obtains only the very scantiest sort of a description of how the house is to be built, with the result that the contractor can build in almost any way he sees fit, so long as he complies in a general way with the terms of the contract. Under these conditions, the owner has little chance of recovering where poor materials and workmanship have been employed; moreover, he has no way of finding out if the contractor's price is a fair one or not. On the other hand, if the working drawings and specifications are prepared by an architect, competitive bids may be taken and the lowest price plus the architect's fee will more than likely be much lower than if the work were given directly to a contractor, and in addition the owner will be assured of a well designed, well built house.

THE architect's fee should be among the first things discussed in arranging for a house. It should be made perfectly clear in advance what the architect is to be paid for his work and what work he is to perform, for the reason that different architects charge different prices and prices vary with the amount and kind of services to be rendered. The usual fee ranges from six to ten per cent on the cost of a building. If the architect is a young man with no large amount of business on hand and an inexpensive office to maintain, he will very likely give full services for six per cent on the cost of the building. If he is a man of recognized ability maintaining an expensive office and is engaged upon many large commissions—he will charge a higher fee, and in most cases is worth it.

The architect's fee for a country house is usually paid in three parts: One-fifth of the whole when the sketches are accepted by the client, two-fifths when the estimating drawings and specifications are completed and the balance when the house is finished. If the

house is an expensive one or one that requires a long time to build the last two-fifths of the commission would probably be divided into several payments. Very often in place of commission an architect agrees upon a fixed sum for his services, and if the owner has any feeling that an architect will try to run the price up to increase his commission, he will be much wiser to settle the fee on a fixed sum basis.

One thing more:—An architect does not as a rule submit sketches "on approval," any more than a doctor makes a diagnosis without being paid for it if his patient is found to be perfectly healthy, or a lawyer enters into the merits of a case without expecting a retainer; and while there are doubtless many men who will offer to submit sketches on approval, they should be regarded with suspicion.

Since the writer is himself an architect, the questions of the relations between architect and client and of the duties of an architect may have been unduly emphasized from one standpoint and too little from the other. It is assumed, however, that those who read this article will in most cases be "clients" and need no explanation of what their feelings are. What an architect should be expected to do for his money has been shown, as has the fact that his services are not entirely without value. As a matter of fact, an experienced architect is almost always a well informed man. If he has built many houses, he has the collective experience of many house keepers behind him. He must be something of a lawyer; and also a reasonably good business man, so that the accounts between the owner and contractor will be kept in something like order. He must be fully acquainted with the various building trades, such as mason work, carpentry, painting, tinsmithing, plumbing, heating and electric work; and he must also be an artist, able to execute in wood, brick and stone, through the medium of poorly informed and inartistic mechanics, a beautiful house which in all respects will meet the exacting demands of the owner.

The Story of Brick

By G. C. MARS

MR. EDWARD J. BANKS, field director of the University of Chicago's Babylonian expedition, reports having found brick at Bismaya, in the Euphrates Valley, which are as good as when they were first made four thousand five hundred years before our era, and adds that there are reasons to believe that the art of brickmaking was known and practiced ten thousand years ago.

As an artificially prepared product, brick is the oldest building material known to man. From the earliest pre-historic times, the inhabitants of ancient Sumeria, Chaldea and Egypt built their houses of sun-dried brick; and centuries afterwards when history, as we know it, was just beginning to dawn, their descendants built temples, palaces and ramparts of brick. Ages before Khammurabi had given his celebrated laws to the Babylonians, before Abraham had been called from Ur of the Chaldees to the Land of Promise, or Moses had led the children of Israel out of their Egyptian bondage, the kings of Chaldea and the Pharaohs of Egypt had dwelt in houses made of brick. As to Nebuchadnezzar, King of Babylon, one of the greatest builders that ever lived and the very greatest builder in brick of all time, he is hardly worth mentioning here, as he really belongs to modern times, going back only six centuries before Christ.

The Greeks doubtless learned the art from the Chaldeans, and that too at a very early epoch, for Schliemann in his excavations of ancient Ilium, made famous by the royal battles of Achilles and Hector and celebrated in the immortal lines of Homer, found great platforms and walls built of brick.

And no less than the distinction of its great antiquity, brick can lay claim to the distinction of a world-wide use, even in very early times. For not only can China, India, Persia, Babylonia, Assyria, Egypt, Greece and Rome, in the old world, boast of ancient brick remains, but the Western world, new to its white discoverers in the fifteenth and sixteenth centuries, revealed old civilizations that had long practiced the art of making and building in brick. The Spanish Conquistadores found, among the Incas and Aztecs, houses, temples, palaces and monuments of brick.

But so far as our modern use of brick is concerned, Rome the master builder of antiquity, has been our teacher. It is probable that the Romans learned their brickcraft from the Greeks. At any rate, they carried it to the height of perfection so far as its structural value is concerned. They used extensively a hard and enduring burnt brick in the body of walls which were generally covered with stone or marble slabs or stucco—a practice still followed in Italy.

The manufacture was under government surveillance and the brick bore the name of the maker—and also that of the Consul, from the time of Trajan (98-117 A.D.). The legionaries knew the art and made brick wherever they were stationed, from which fact we can often trace their movements and the dates of their occupancy. From the Euphrates to the Pillars of Hercules and from the Libyan desert to the Firth of Forth, are found the remains—often very extensive—of Roman brickwork.

In the late imperial epoch, the brick came to be made with a finer surface and were freely exposed in courses alternating with stone. It was this practice which doubtless led to the Byzantine style of brickwork which was laid in bands of color, broadly and strongly marked—a style widely employed in ecclesiastical building, and still frequently seen in the Russian churches of today as an inheritance of Byzantine culture.

With the decay of the Roman Empire in the West, the Church took up and carried on the brick tradition in its ecclesiastical structures. In those countries where stone was rare, such as Northern Italy, Southern France, and the low lands of Northern Germany, brick enjoyed during the Middle Ages an extensive use.

It was not, however, until after the Crusaders had stirred the mind of Europe to a new life, preparing the way both for the great Gothic period of architecture in the thirteenth century, and for the industrial activities of the free Communes, that brick entered upon its palmy days and became a natural and popular material for building, in the hands of the great free mason guilds of the period.

In Northern Italy, the brick used were exclusively red, fine examples of which are found in the churches, palaces and public buildings of Siena, Milan and Bologna—sometimes laid, after the old Roman manner, in alternating courses with stone.

But it was especially in the North of Europe that brickwork flourished at this time. The great burgher towns of the Hansa in

Northern Germany and Flanders, growing in wealth and power, vied with each other and spared no expense, in adorning their cities with splendid buildings, both public and private, most of which were in brick—as witness the famous belfry of Bruges, of the thirteenth century, celebrated in the lines of Longfellow; the great Hall at Antwerp, of the fifteenth century; or the Rathaus, of the fifteenth, and the stately Marienkirche, of the thirteenth century, at Lubeck.

Although quite apart from the general current of European life, and whether influenced by their Christian neighbors or their co-religionists of Africa, who drew their inspiration from Byzantine art, the Moors of Spain revealed splendid ability in the handling of brick and employed it with striking effect, as we may see in such noble structures as the Alhambra at Granada and the mosque, now cathedral, of Cordova.

WHEN the Renaissance, in the sixteenth century, broke over the Alps into France and Germany, brick practically disappeared from public building in those countries, and did not get back its old medieval prestige until the middle of the last century, when the wonderful advances in the technique of its manufacture revealed its possibilities, especially in Germany, to the builder and architect. In the Low Countries, Holland and England, however, it held its own and even made substantial gains, as in England.

This gain in England is easily explicable when it is remembered that, with the Renaissance in England, brick and its possibilities of manufacture were essentially a rediscovery. In England, as the Roman province of Britannia, brick were made and extensively used for nearly four hundred years until the Legions were recalled at the beginning of the fifth century to protect Rome, trembling before the onrush of the northern invaders. From that time on, until the thirteenth century, the only brick used in England were those taken from the Roman remains. In the time of the first two Edwards (1270-1327), it is probable that the Flemish mode of brickmaking and the style of building pointed gables were introduced into England, but there was no general manufacture and use of brick in that country until the fifteenth century, and then only for important buildings.

In the days of Henry VIII (1509-1547), however, when the Renaissance was beginning to be felt in the Island Kingdom, brick and its uses were brought to a high state of perfection, a fact probably

due to Henry's encouragement of artisans from Flanders. In the following century, the great London fire, 1666, not only transformed that city from a wooden to a brick town, but gave a great spur, all over England, to the development of the manufacture and use of brick, as well as to its ornamental treatment.

After the Renaissance had run its course, brickwork for a time declined in England, but in the days of Queen Anne and the Georges, or during the 18th century, it regained favor and became the honored medium for the expression of that comfort and dignity which we so often see in the fine old country houses scattered throughout England. It was this style that exercised the great formative influence on our own simpler colonial architecture, both of the North and of the South.

In the early days of the American colonies, small quantities of brick were imported from Holland and England, and doubtless from time to time they were brought to the colonies in Dutch and England bottoms as ballast. But the colonists did not at all depend upon such sources for their supply of brick; for American brickmaking, according to the most reliable data, was established at a very early period and was well able to supply the home market.

Davis in his *Practical Treatise on the Manufacture of Brick*—followed by the *Encyclopedia Britannica*—informs us that the first brick house in this country (no longer standing) was erected on Manhattan Island in 1633 by Wouter Van Twiller of Amsterdam, a governor of the Dutch West Indies Company, and that the first brickmaking in the colonies was at New Haven in 1650. The claim made for the Cradock House (still standing) at Medford, Mass., that it was built in 1634 is denied by certain authorities, who attribute it to Peter Tufts and assign the date 1677-80.

So far as the introduction of brickmaking into this country is concerned, the new *International Encyclopedia* is authority for the statement that brick were made in Virginia as early as 1612, which would seem to indicate that brick houses must have been built in Virginia as early as that time, a conjecture confirmed by evidence cited in Bruce's *Economic History of Virginia in the Seventeenth Century.* This earlier date for brickmaking in the colonies is substantiated by the historical studies of Ries & Leighton, who in their *History of the Clay Working Industry in the United States,* give the following localities with their dates: Virginia, 1611; Massachusetts

and New York, 1629; Maine, 1635; North Carolina, 1663; Rhode Island, 1680; Pennsylvania, 1683. And so prosperous had the industry become by the end of the eighteenth century, continue these authorities, that brick were being exported from this country. In 1791, the export of brick amounted to 743,000. From that time on, American brickmaking has followed the natural growth of the country, until today, in point of quantity and quality, it leads the brickmaking industry of the world.

This growth of brick manufacture has exercised a very wholesome and potent influence in furthering a purer and sounder style of domestic architecture which, during the middle of the century, fell into the slough of a bastard classical or Renaissance eclecticism, or of Rococo and Barroque monstrosities.

The Georgian influence, largely the result of the school of such eminent architects as Inigo Jones, Sir Christopher Wren, and Sir William Chambers, made itself felt in the English colonies along our coast, and was adapted to the uses of either the simple Round Head of New England or the more pretentious Cavalier of Virginia. This colonial style presented very worthy types of domestic architecture, the simple merits of which have been widely appreciated in our more modern style of building. During the past decade or two, especially, this simpler style has been freely adopted—and adapted to our needs—or a simple and graceful form of line and curve has been used in creating a style that meets the practical uses of our modern world, as well as the requirements of artistic taste.

THE great variety of beautiful face-brick now manufactured naturally appeals to the architect as offering an opportunity in the wall surface for the exercise of his finest artistic efforts. In his skilful hands, the selection of the bond, the treatment of the mortar joint, and the color tone and texture of the brick, are so many varied and variable elements with which he can weave a fabric of great beauty. The distinction of brickwork is that, by reasons of its numerous units, it is a plastic material, yielding to every touch of the architect. So that the result, like every work of art, has a distinct life, character and individuality of its own, such as no other material, except marble or stone in vast structures, can give. Although rivaling marble or stone in its adaptability to pretentious buildings, brick has the advantage of being peculiarly fitted for the

architecture of the home. And here it offers not merely the highest artistic merit, but pre-eminently stands for comfort, safety and economy. Once built, a brick house requires no expenditure for the maintenance of its wall surface; it defies the corrosion of the elements; as a product of fire, it scorns conflagration; and offers comfort in all seasons of the year.

Of the manufacturers of face-brick in America, for the quality, quantity and variety of product, the Hydraulic-Press Brick Company holds the leading place. Established in St. Louis, in 1868, it steadily won, by the quality of its product and the efficiency of its service, the approval of the brick world, until today it works numerous clay deposits in ten different states, and keeps its fires burning in twenty-two different plants.

In the main, there are two kinds of brick made by the Hydraulic-Press Brick Company, the dry-pressed and the wire-cut brick, both indicated in the name Hy-tex.

The dry-pressed brick are for the most part made of alluvial or fire clays, first seasoned and then, after being ground to a coarse powder, submitted in the hydraulic machine to a pressure of many tons. Such a machine will turn out from 20,000 to 50,000 brick a day, hard enough, in their green state, to be handled with impunity, the number depending not only on the size of the machine but the nature and condition of the clay. A day or so suffices to dry out the superficial moisture—for it must be understood that "dry-pressed" does not mean absolutely "dry"—when they are ready to be stacked or "set" in the kiln, in number all the way from 50,000 to 600,000, and subjected to a temperature that may rise to 2500 degrees Fahrenheit, for a period of from six to eleven days. They are then said to be burned off, when the kiln is allowed to cool and the brick sorted and piled in sheds, or shipped to the point of operation.

These brick are usually burned in either up-draft or down-draft kilns, although in certain localities the continuous kiln is employed. In up-draft kilns, the flame passes directly up through the brick from the bottom to the top of the kiln. Down-draft kilns are so contrived, by means of a bag wall, that the flame is prevented from striking the brick until it has first reached the top of the kiln, when it pours down through the brick to the flues. In the continuous kiln, the flame is drawn horizontally through the brick mass. The way in which the brick are "set" and the method of burning result in

producing various effects, so that various kinds of brick are produced in the same kiln—known when taken promiscuously as the kiln-run. It is this hydraulically pressed brick that puts the "Hy" in Hy-tex.

The wire-cut brick are made in an entirely different way and usually of a different material. Instead of clay, shale for the most part is used which, when chemically considered, is indeed clay but differs from it greatly in physical constitution. Shale is a clay which has geologically been subjected to such pressure that it has become very hard and has reached the consistency of soft stone, just short of the laminated condition of slate. Shale when found in deep deposits is mined very much as soft coal, and is approached either by drifts or vertical shafts.

For brickmaking, it is crushed and reduced to the consistency of stiff mud—hence the term stiff-mud brick—when it is run through a machine, terminating in a die, from which it is forced upon a long table in the form of a rectangular strip or ribbon, with a cross section slightly greater than that of the standard brick—to allow for shrinkage—and is cut into proper lengths or widths by fine wires revolved as the diameters of a wheel. These machines can turn out all the way from 40,000 to 100,000 brick a day, and these, after being dried, are set in the kiln and burned in the same manner as the pressed brick.

In case face-brick of a certain variety are wanted, the stiff-mud ribbon, which is smooth as it issues from the machine, may be left smooth, or scraped with a wire to produce a rough or matt surface. This roughening of the mud ribbon, in various ways, gives a variety of pleasing effects to the finished brick surface, which has become very popular in recent years among architects and builders. Although every kind of brick, rough or smooth, has a surface texture of its own, it is these artificially roughened, or matt, brick to which the name texture, in one form or another, is usually applied—and they are responsible for putting the "tex" in Hy-tex.

THE Hydraulic-Press Brick Company justly prides itself on a third kind of brick, which is the finest and most expensive brick on the market, although the most economical when its durability and perfect finish are taken into consideration. They are the enameled or Hy-namel brick. For a number of years the Hydraulic-Press Brick Company bent its resources on producing an enameled

brick that could compete with the fine imported English variety. As in many like cases, repeated experiment almost ended in despair; but persistence won the day, and a brick was finally produced that not only equaled the imported competitor, but surpassed it.

The Hy-namel brick stands unrivaled in the beauty and durability of its enameled surface. That it can be offered as neither scaling, crazing, or discoloring, is due to the thorough and skilful method of its manufacture. The dry-pressed brick is first prepared as a thoroughly fired biscuit. It is then treated with the enamel finish and burned again, much as fine porcelain is burned. The trouble taken is more than repaid by the satisfaction it gives the manufacturer and the service it renders the builder. So sure is the Company of the entire soundness of these brick, that it guarantees their durability and freedom from defect.

Closely allied to Hy-namel are the Porcelain and Salt Glaze varieties. To secure the Porcelain surface, the brick is mechanically treated with a preparation which is thoroughly burned into the clay, producing color effects that run through a beautiful range of grays. The Salt Glaze is secured in the kiln during the process of burning and is a smooth impervious surface admirably suited to meet the requirements of sanitary construction. But while the Porcelain and Salt Glaze brick approach in appearance and function the Hy-namel, they belong in reality to the class of Hy-tex brick.

By no means the least advantage in dealing with the Hydraulic-Press Brick Company is its entire responsibility. Well-nigh fifty years of operation has not only put it in the forefront of the face-brick manufacturers of the world, but gives it the capacity to meet with prompt efficiency every demand, no matter how large, made upon it. Hy-tex brick are found in thousands of modest homes, small stores, and little churches and schools all over our country; but they are also found in thousands of palatial residences, university buildings, great churches and schools, lodges and temples, towering sky-scrapers, and public buildings.

There is, however, no problem of building that comes so near to a man's heart—or to his purse—as the problem of a home, and the man who is thinking of building a home cannot afford, viewed from the standpoint of real economy, comfort, fire-safety or beauty, to proceed until he familiarizes himself with the merits of Hy-tex.

Beware!

Look for this Name on the Brick You Buy.

EVERY TEXTURE

Enameled
Porcelain
Salt-glazed
Press
Re-press
Rough Wire-cut
Smooth Wire-cut

The Standard of Quality in Brick.

EVERY COLOR

Cream
Gray, Buff
Golden Rod
Red
Velour
Bronze
Gunmetal

BE A HOUSEHOLDER

Have a home you can call your own. "There's no place like home," is not only poetry, but hard solid fact.

The best property, financially and sentimentally, to have in your own name is your home. It is one of the inalienable rights of every American citizen to be a home owner, to have a place absolutely sacred to himself and his family; into which no unwelcome guest may intrude; and where he can, as in his own castle, defy the slings and arrows of outrageous fortune. A homeless man is like a man without a country.

A-B-C OF HOME BUILDING

A—Build your home the way you want it, and do not be compelled to take a house the way the landlord wants it.

B—Build it of Brick. For a home, brick is more economical than stone, more lasting, comfortable, and secure than frame, more real and living than stucco or cement—and may be made more beautiful than any of them.

C—Build your home of Hy-tex Brick, as the latest word in brickcraft. There are one hundred different forms, color tones, and surface textures to choose from. Every Hy-tex brick is sound to the core and rings like a bell. To tell your friends that your home is built of Hy-tex brick is equivalent to telling them that you have the best and most beautiful material that the art of moulding and burning brick can produce.

HYDRAULIC-PRESS BRICK COMPANY

SAINT LOUIS

LARGEST MAKERS OF FACE BRICK IN THE WORLD

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